L17: Entry 11 of 14 File: DWPI Jul 22, 1997

DERWENT-ACC-NO: 1997-422037
DERWENT-WEEK: 199739
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TITLE: Information registration search appts e.g. for company name, telephone number, zip code - includes second renewal unit which updates data corresponding to display content and administration information by frames other than frame accomplished by indication

PATENT-ASSIGNEE: CANON KK (CANO)

PRIORITY-DATA: 1996JP-0002770 (January 11, 1996)

PATENT-FAMILY:

	PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
☐	JP 09190442 A	July 22, 1997		008	G06F017/30

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP 09190442A	January 11, 1996	1996JP-0002770	

INT-CL (IPC): G06F 17/30

ABSTRACTED-PUB-NO: JP 09190442A
BASIC-ABSTRACT:

The appts includes a data memory unit which stores data and displays the stored data by a data display unit (104) on a screen with desired format of frame. An administration information memory unit stores the administration information corresponding to display data. Based on an operation indication a first renewal unit updates the data stored in the data memory unit.

Corresponding to the contents and the administration information, the data are updated by a updating unit. A second renewal unit updates the display contents and administration information on data by frames other than the frame which is accomplished by indication.

ADVANTAGE - Improves operativity.

ABSTRACTED-PUB-NO: JP 09190442A
EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.1/10

DERWENT-CLASS: T01
EPI-CODES: T01-J05B3;

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Terms used: **replicated database** and **asynchronous updates** Found **872** of **211,032**

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1 Update propagation strategies to improve freshness in lazy master replicated databases

Esther Pacitti, Eric Simon

February 2000 **The VLDB Journal — The International Journal on Very Large Data Bases**, Volume 8 Issue 3-4

Publisher: Springer-Verlag New York, Inc.

Full text available: pdf(151.35 KB) Additional Information: full citation, abstract, citings, index terms

Many distributed database applications need to replicate data to improve data availability and query response time. The two-phase commit protocol guarantees mutual consistency of replicated data but does not provide good performance. Lazy replication has been used as an alternative solution in several types of applications such as on-line financial

May 1997 **Proceedings of the sixteenth ACM SIGACT-SIGMOD-SIGART symposium on Principles of database systems PODS '97**
Publisher: ACM Press
Full text available: pdf(1.59 MB) Additional Information: full citation, references, citings, index terms

4 Global change master directory: object-oriented active asynchronous transaction management in a federated environment using data agents
Zina Ben Miled, Srinivasan Sikkupparbathyam, Omran Bukhres, Kishan Nagendra, Eric Lynch, Marcelo Areal, Lola Olsen, Chris Gokey, David Kendig, Tom Northcutt, Rosy Cordova, Gene Major, Nanine Savage
March 2001 **Proceedings of the 2001 ACM symposium on Applied computing SAC '01**
Publisher: ACM Press
Full text available: pdf(185.55 KB) Additional Information: full citation, references, index terms

Keywords: JDBC, Java, RMI, World Wide Web, XML, asynchronous, component, distributed, distributed object management, global transaction management, interface, interoperability, object-oriented

5 Designing and implementing asynchronous collaborative applications with Bayou
W. Keith Edwards, Elizabeth D. Mynatt, Karin Petersen, Mike J. Spreitzer, Douglas B. Terry, Marvin M. Theimer
October 1997 **Proceedings of the 10th annual ACM symposium on User interface software and technology UIST '97**
Publisher: ACM Press
Full text available: pdf(1.58 MB) Additional Information: full citation, references, citings, index terms

Keywords: Bayou, asynchronous interaction, computer-supported cooprative work, distributed systems

6 A new approach to developing and implementing eager database replication protocols
Bettina Kemme, Gustavo Alonso
September 2000 **ACM Transactions on Database Systems (TODS)**, Volume 25 Issue 3
Publisher: ACM Press
Full text available: pdf(449.43 KB) Additional Information: full citation, abstract, references, citings, index terms, review

Database replication is traditionally seen as a way to increase the availability and performance of distributed databases. Although a large number of protocols providing data consistency and fault-tolerance have been proposed, few of these ideas have ever been used in commercial products due to their complexity and performance implications. Instead, current products allow inconsistencies and often resort to centralized approaches which eliminates some of the advantages of replication. As an ...

Keywords: database replication, fault-tolerance, group communication, isolation levels, one-copy-serializability, replica control, total error multicast

7 Multi-site distributed database transactions utilizing deferred update

Parvathi Chundi, Daniel J. Rosenkrantz, S. S. Ravi
April 1997 **Proceedings of the 1997 ACM symposium on Applied computing SAC '97**
Publisher: ACM Press
Full text available: pdf(566.80 KB) Additional Information: full citation, references, index terms

8 Scalable database replication through dynamic multiversioning
Kaloian Manassiev, Cristiana Amza
October 2005 **Proceedings of the 2005 conference of the Centre for Advanced Studies on Collaborative research CASCON '05**
Publisher: IBM Press
Full text available: pdf(313.41 KB) Additional Information: full citation, abstract, references, index terms

We scale the database back-end in dynamic content web servers on a set of database replicas while maintaining strong consistency. This is contrary to conventional wisdom in replicated databases which says that one could have either strong consistency or scalability, but not both.The key to scaling is a novel integrated fine-grained concurrency control and data replication algorithm called Dynamic Multiversioning that provides fine-grained distributed concurrency control at the level of a memory ...

9 MIDDLE-R: Consistent database replication at the middleware level
Marta Patiño-Martinez, Ricardo Jiménez-Peris, Bettina Kemme, Gustavo Alonso
November 2005 **ACM Transactions on Computer Systems (TOCS)**, Volume 23 Issue 4
Publisher: ACM Press
Full text available: pdf(1.81 MB) Additional Information: full citation, abstract, references, citings, index terms

The widespread use of clusters and Web farms has increased the importance of data replication. In this article, we show how to implement consistent and scalable data replication at the middleware level. We do this by combining transactional concurrency control with group communication primitives. The article presents different replication protocols, argues their correctness, describes their implementation as part of a generic middleware, Middle-R, and proves their feasibility with an extensive p ...

Keywords: Database replication, eager data replication, middleware, scalability

10 Data management support for asynchronous groupware
Nuno Preguiça, J. Legatheaux Martins, Henrique Domingos, Sérgio Duarte
December 2000 **Proceedings of the 2000 ACM conference on Computer supported cooperative work CSCW '00**
Publisher: ACM Press
Full text available: pdf(190.11 KB) Additional Information: full citation, abstract, references, citings, index terms

In asynchronous collaborative applications, users usually collaborate accessing and modifying shared information independently. We have designed and implemented a replicated object store to support such applications in distributed environments that include mobile computers. Unlike most data management systems, awareness support is integrated in the system. To improve the chance for new contributions, the system provides high data availability. The development of applications is supported by ...

Keywords: asynchronous groupware, awareness, development support, mobile computing, object framework

11 Replica control in distributed systems: as asynchronous approach

Calton Pu, Avraham Leff

April 1991 **ACM SIGMOD Record , Proceedings of the 1991 ACM SIGMOD international conference on Management of data SIGMOD '91**, Volume 20 Issue 2

Publisher: ACM Press

Full text available: pdf(1.15 MB) Additional Information: full citation, references, citings, index terms

12 Research sessions: Research 20: Reliability: Lazy database replication with snapshot isolation

Khuzaima Daudjee, Kenneth Salem

September 2006 **Proceedings of the 32nd international conference on Very large data bases VLDB '06**

Publisher: VLDB Endowment

Full text available: pdf(567.69 KB) Additional Information: full citation, abstract, references, index terms

Snapshot isolation is a popular transactional isolation level in database systems. Several replication techniques based on snapshot isolation have recently been proposed. These proposals, however, do not fully leverage the local concurrency controls that provide snapshot isolation. Furthermore, guaranteeing snapshot isolation in lazy replicated systems may result in transaction inversions, which happen when transactions see stale data. Strong snapshot isolation, which is provided in centralized ...

13 Multiview access protocols for large-scale replication

Xiangning Liu, Abdelsalam Helal, Weimin Du

June 1998 **ACM Transactions on Database Systems (TODS)**, Volume 23 Issue 2

Publisher: ACM Press

Full text available: pdf(365.98 KB) Additional Information: full citation, abstract, references, citings, index terms, review

The article proposes a scalable protocol for replication management in large-scale replicated systems. The protocol organizes sites and data replicas into a tree-structured, hierarchical cluster architecture. The basic idea of the protocol is to accomplish the complex task of updating replicated data with a very large number of replicas by a set of related but independently committed transactions. Each transaction is responsible for updating replicas in exactly one cluster and invoking add ...

Keywords: data replication, large-scale systems, multiview access

14 Disconnection modes for mobile databases

Joanne Holliday, Divyakant Agrawal, Amr El Abbadi

July 2002 **Wireless Networks**, Volume 8 Issue 4

Publisher: Kluwer Academic Publishers

Full text available: pdf(198.57 KB) Additional Information: full citation, abstract, references, citings, index terms

As mobility permeates into todays computing and communication arena, we envision application infrastructures that will increasingly rely on mobile technologies. Traditional database applications and information service applications will need to integrate mobile entities: people and computers. In this paper, we develop a distributed database framework for mobile environments. A key requirement in such an environment is to support frequent connection and disconnection of database sites. We present ...

Keywords: data consistency, databases, disconnected operation, mobility, replication

15 Managing update conflicts in Bayou, a weakly connected replicated storage system

D. B. Terry, M. M. Theimer, Karin Petersen, A. J. Demers, M. J. Spreitzer, C. H. Hauser
December 1995 **ACM SIGOPS Operating Systems Review , Proceedings of the fifteenth ACM symposium on Operating systems principles SOSP '95**, Volume 29 Issue 5
Publisher: ACM Press
Full text available: pdf(1.56 MB) Additional Information: full citation, references, citings, index terms

16 Reactive provisioning of backend databases in shared dynamic content server clusters

Gokul Soundararajan, Cristiana Amza
December 2006 **ACM Transactions on Autonomous and Adaptive Systems (TAAS)**, Volume 1 Issue 2
Publisher: ACM Press
Full text available: pdf(928.76 KB) Additional Information: full citation, abstract, references, index terms

This paper introduces a self-configuring architecture for on-demand resource allocation to applications in a shared database cluster. We use a unified approach to load and fault management based on data replication and reactive replica provisioning. While data replication provides scaling and high availability, reactive provisioning dynamically allocates additional replicas to applications in response to peak loads or failure conditions, thus providing per application performance. We design an e ...

Keywords: Autonomic systems, databases, query processing, transactions

17 Flexible update propagation for weakly consistent replication

Karin Petersen, Mike J. Spreitzer, Douglas B. Terry, Marvin M. Theimer, Alan J. Demers
October 1997 **ACM SIGOPS Operating Systems Review , Proceedings of the sixteenth ACM symposium on Operating systems principles SOSP '97**, Volume 31 Issue 5
Publisher: ACM Press
Full text available: pdf(2.16 MB) Additional Information: full citation, references, citings, index terms

18 Epidemic algorithms for replicated database maintenance

Alan Demers, Dan Greene, Carl Houser, Wes Irish, John Larson, Scott Shenker, Howard Sturgis, Dan Swinehart, Doug Terry
January 1988 **ACM SIGOPS Operating Systems Review**, Volume 22 Issue 1
Publisher: ACM Press
Full text available: pdf(1.71 MB) Additional Information: full citation, abstract, citings, index terms

When a database is replicated at many sites, maintaining mutual consistency among the sites in the face of updates is a significant problem. This paper describes several randomized algorithms for distributing updates and driving the replicas toward consistency. The algorithms are very simple and require few guarantees from the underlying communication system, yet they ensure that the effect of every update is eventually reflected in all replicas. The cost and performance of the algorithms are tu ...

19 Managing periodically updated data in relational databases: a stochastic modeling approach

Avigdor Gal, Jonathan Eckstein
November 2001 **Journal of the ACM (JACM)**, Volume 48 Issue 6

Publisher: ACM Press

Full text available: pdf(466.73 KB) Additional Information: full citation, abstract, references, citings, index terms

Recent trends in information management involve the periodic transcription of data onto secondary devices in a networked environment, and the proper scheduling of these transcriptions is critical for efficient data management. To assist in the scheduling process, we are interested in modeling *data obsolescence*, that is, the reduction of consistency over time between a relation and its replica. The modeling is based on techniques from the field of stochastic processes, and provides several ...

Keywords: Data obsolescence, database replication management, obsolescence cost, stochastic modeling

20 Optimistic replication

Yasushi Saito, Marc Shapiro
March 2005 **ACM Computing Surveys (CSUR)**, Volume 37 Issue 1

Publisher: ACM Press

Full text available: pdf(656.72 KB) Additional Information: full citation, abstract, references, citings, index terms

Data replication is a key technology in distributed systems that enables higher availability and performance. This article surveys optimistic replication algorithms. They allow replica contents to diverge in the short term to support concurrent work practices and tolerate failures in low-quality communication links. The importance of such techniques is increasing as collaboration through wide-area and mobile networks becomes popular.Optimistic replication deploys algorithms not seen in tradition ...

Keywords: Replication, disconnected operation, distributed systems, large scale systems, optimistic techniques

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IET JNL	IET Journal or Magazine
IEEE CNF	IEEE Conference Proceeding
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IEEE STD	IEEE Standard

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1. **Dynamic replica control based on fairly assigned variation of data with w for loosely coupled distributed systems**
Yamashita, T.;
Distributed Computing Systems, 2002. Proceedings. 22nd International Confer
2-5 July 2002 Page(s):280 - 289
Digital Object Identifier 10.1109/ICDCS.2002.1022265
AbstractPlus | Full Text: PDF(474 KB) **IEEE CNF**
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2. **A replica control method for improving availability for read-only transacti**
Chang Sup Park; Myoung Ho Kim; Yoon Joon Lee;
Database Engineering and Applications Symposium, 1997. IDEAS '97. Procee International
25-27 Aug. 1997 Page(s):104 - 112
Digital Object Identifier 10.1109/IDEAS.1997.625664
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A Replica Control Method for Improving Availability for Read-only Transactions†

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Abstract

Data replication is often considered in distributed database systems to enhance availability and performance. The benefit of data replication, however, can only be realized at the cost of maintaining the consistency of data. In particular, network partition failures make it more difficult to achieve high data availability while ensuring strong correctness criteria such as 1-copy serializability. In this paper, we propose a replica control method to improve the availability of data in the presence of network partition failures. Our method extends the traditional primary copy method by using the relaxed correctness criterion called insular consistency for large-scale distributed systems, where partition failures frequently occur. We focus on increasing the availability of data for read-only transactions. We introduce a version vector as a tool for guaranteeing insular consistency and present a mechanism that allows read-only transactions to be executed at any partition as long as the insular consistency is satisfied. An asynchronous update propagation mechanism is also employed to improve the performance of update operations. We also show that the proposed method is correct and give some performance considerations.

1. Introduction

The main goal of data replication in a distributed database system is to enhance data availability and performance. By storing important data at multiple sites, we can continue to execute operations on the data even if failures occur at some parts of the system. Besides, performance of transactions can be improved because an efficient data access based on geographic proximity can be provided.

†This work was supported by Korea Science and Engineering Foundation(KOSEF) through Center for Artificial Intelligence Research(CAIR), the Engineering Research Center(ERC) of Excellence Program.

A replicated database should provide user transactions with transparency for replicated data. A read or write operation on a logical data item in a transaction should be transparently mapped into read or write operations on physical replicas of the data item, and consistency among the replicas must be maintained according to a predefined correctness criterion. A replica control protocol is required for the transparent and consistent management of replicas.

One-copy serializability(*1SR*)[3] is the most widely used correctness criterion in the literature on replicated databases. *1SR* means that the concurrent execution of transactions on a replicated database must be equivalent to a serial execution of those transactions on a non-replicated or *one-copy* database. It is the incorporated notion of serializability in non-replicated databases and one-copy equivalence, and it can be guaranteed by a concurrency control algorithm and a replica control protocol.

A distributed system consists of two kinds of components: sites, which process information, and communication links, which transmit information between sites. Both of them can experience system failures. As for site failures, we assume the fail-stop model [11]. The most critical communication failure is *a network partition failure* [5], where a network is partitioned into multiple sub-networks that cannot communicate with each other. If two transactions that update the same data item execute the update on different replicas in different partitions, an inconsistency can be introduced across the partitions. So difficulty lies in keeping consistency across all partitions in the face of system failures while at the same time enhancing data availability [5].

In this paper, we propose a data replication method that can improve data availability and system performance in a large-scale distributed database system where network partition failures frequently occur. We use as our correctness criterion the insular consistency [7] that is a relaxed correctness criterion from *1SR*. We mainly focus on increasing data availability for read-only transactions. In our method, most of read-only transactions can be executed at any partition in a network regardless of the number of partitions or the

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size of each partition. Our protocol is based on the primary copy method, but has different update mechanisms that do not severely degrade performance of update transactions.

The remainder of this paper is organized as follows. In section 2, we discuss previous related works and present the motivation of our work. Section 3 describes the proposed replica control protocol in detail and Section 4 proves the correctness of our method. Finally, we conclude with a discussion of our work in section 5.

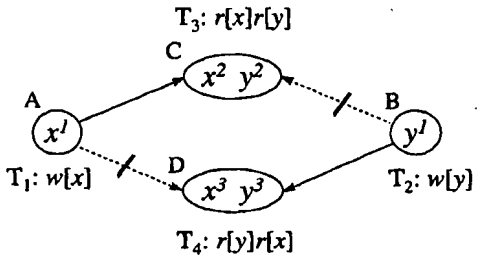
2. Related Works and Motivation

There are broadly two classes of consistency maintenance mechanisms of data replication, i.e., *pessimistic* and *optimistic*[5]. Pessimistic strategies keep a replicated database in a consistent state all the time by limiting the availability of data. They restrict the execution of update operations on a data item within only one partition. Most of the methods, including the primary copy method and the quorum consensus algorithm, belong to this class. On the other hand, optimistic strategies do not limit availability and allow updates on replicas of a data item in any partition. In these strategies, the system detects and resolves an inconsistency when it recovers from failures. Optimistic strategies in general are considered difficult to be applied because they require the rollback of the transactions that are already committed or the execution of appropriate compensating transactions.

[9] discusses *eager replication* and *lazy replication*. In the eager replication, an update operation is executed on all replicas of a data item synchronously in an atomic transaction, while the lazy replication applies an update operation to only one replica or a subset of replicas in a transaction and then propagates it to the other replicas asynchronously after the transaction commits. The difference in their update scheme has a great effect on consistency and update performance.

2.1. Insular Consistency

In most applications, the frequency of read-only transactions is much higher than that of update transactions. Hence, there have been many works that specifically focus on improving data availability for read-only transactions. [7] proposes three correctness criteria for read-only transactions in a fully replicated database, including *insular* consistency. The notion of insular consistency that has been shown to be effective in many applications[2, 7, 12] is as follows: an execution history H of some transactions satisfies insular consistency if and only if every sub-history that consists of all update transactions and a read-only transaction in H satisfies *ISR*. Figure 1 shows an example history that satisfies insular consistency. In the figure, each node



{T1, T2, T3}: *ISR* (T1→T3→T2)
{T1, T2, T4}: *ISR* (T2→T4→T1)
{T1, T2, T3, T4}: insular consistent

Figure 1. An example of insular consistency

represents a site where replicas of data are stored. x^1, x^2, and x^3 represent three replicas of a data item x, and y^1, y^2, and y^3 represent three replicas of a data item y. We suppose that update transactions T_1 and T_2 are executed at site A and site B respectively, and that after they commit at those sites, their results, or the new values of x and y are independently propagated to site C and site D. We also suppose that failures occur on the communication links between A and D, and between B and C so that the updates of x and y cannot be propagated to D and C, respectively. Now, if read-only transactions T_3 and T_4 are executed at C and D respectively, T_3 will see the result of only T_1, and T_4 will see the result of only T_2. Therefore, the execution history of $\{T_1, T_2, T_3, T_4\}$ is not one-copy serializable, while it satisfies insular consistency because the histories of $\{T_1, T_2, T_3\}$, $\{T_1, T_2, T_4\}$, and $\{T_1, T_2\}$ are all one-copy serializable.

[12] introduces three notions of consistency and proposes algorithms for executing read-only transactions in multiversion environment. [2] has also developed a replica control protocol based on insular consistency to enhance data availability for read-only transactions by using a new update propagation mechanism, called Commit Propagation Mechanism. Our method has some similarities with this method in that it adopts insular consistency as a correctness criterion and makes use of piggy-backing necessary information on the messages of the two-phase commit(2PC) protocol. This method, however, is fundamentally different from our method in three ways: (1) it is based on the standard quorum consensus protocol[8], (2) it guarantees insular consistency with respect to only insular transactions[1], and (3) its protocol becomes relatively complex for a partially replicated database.

[1] The insular transaction [7] means a read-only transaction that can be executed entirely at a single site.

2.2. Motivation

Most proposed methods for data replication adopt *ISR* as their consistency criteria. There are several problems to apply these methods in practice. First, the performance of a system degrades significantly because many replicas need to be synchronously accessed before committing a transaction. Second, they cannot cope with network partition failures effectively. When a network is partitioned, most methods allow read and write operations within only one partition or prohibit write operations in all partitions in order to prevent the occurrence of inconsistency among different partitions. Such approaches inevitably impose a severe restriction on data availability. Overhead from synchronous updates and vulnerability for a network partition failure are more serious in large-scale distributed systems and mobile computing environment.

It is important to make as many read-only transactions can be executed as possible when the frequency of read-only transactions is much higher than that of update transactions. Since *ISR* is considered too restrictive for read-only transactions in many applications, we need other correctness criteria to optimize the execution of read-only transactions.

In this paper, we propose a replication method that is appropriate for large-scale distributed systems or mobile computing systems, in which network partition failures frequently occur. Our method uses insular consistency as a correctness criterion and applies an asynchronous propagation scheme for the updates of replicas in remote sites, which may pay expensive communication cost and experience frequent communication failures. More importantly, our method improves data availability by allowing read-only transactions to execute in any partition including replicas of all data to read as much as possible.

3. Our Replication Method

3.1. Model and Assumption

Our replication method is for the large-scale distributed environment where many sites are distributed over extensive areas. Some characteristics of this environment are that communication cost between two sites that are remote from each other is expensive and that network partition failures frequently occur.

Without loss of generality, we make the following assumptions in this paper. First, the scheduler in each site uses a concurrency control algorithm that can guarantee serializable executions of transactions, such as the distributed two-phase locking algorithm. Second, there is no loss of the messages transmitted between two sites of different clusters. This can be realized with a system service

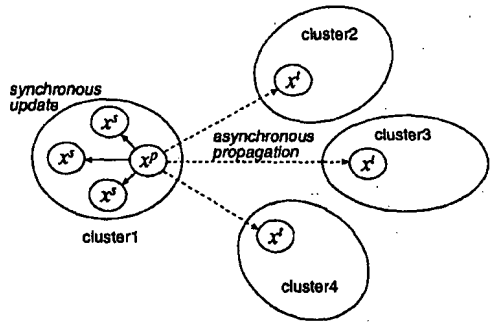


Figure 2. A data replication model in a large-scale distributed system

such as a Recoverable Queuing System(RQS)[4, 6]. Finally, distributed sites are geographically grouped into several clusters. The communication cost is more expensive and the communication failures occur more frequently *between* clusters than those *within* a cluster. This is shown in Figure 2.

Our replication method is based on the primary copy method[1]. Replicas of each data item are divided into one primary copy and many backup copies, and all read and write operations on a data item are first transmitted to the primary copy site of it and then executed on the primary copy of the data item to guarantee *ISR*. Our method, however, takes further steps of dividing backup copies into two groups, i.e., *secondary copies* and *tertiary copies* according to whether they are contained in the cluster to which the primary copy belongs or not, and using different update propagation schemes for two kinds of replicas. To put it concretely, while secondary copies in the cluster in which a primary copy is contained are synchronously updated before a transaction commits, the result of the update is propagated to tertiary copies in the other clusters asynchronously after the transaction commits. By committing a transaction without waiting for expensive update propagation to the other clusters to be finished, we can decrease the response time of the transaction.

While a secondary copy of a data item always has the latest value, which is the same one as the primary copy of the data item has, a tertiary copy in a different cluster has a stale value until all the new values written are propagated to it. Therefore, when many transactions concurrently execute, many different versions of a data item may exist at the non-primary copies of it. These versions can be ordered by the time when they were created.

In our method, the location of the primary copy of each data item is determined as follows. Generally, for each replicated data item, there exists a site that plays a role of its owner. The owner site of a data item and the cluster that contains it are respectively called *home site* and *home cluster* of the data item, and a certain replica in the home site is designated as the primary copy of the data item. In this paper, we assume that most update transactions that update a data item are issued at the home site or at one of the other sites in the home cluster of the data item. For example, if a man that resides in an area A has an account at a bank, he will visit a branch of the bank in the area A more frequently than branches in the other areas. That means updates on his account will be originated mainly in A. In this case, we designate a site in the area A as the home site of the account and store the primary copy of it in that site. By using the notion of the home cluster, we can improve the availability of a data item in an area where the update requests on the data item occur most frequently.

On the other hand, when a failure occurs at the primary copy site of a data item, we select a new primary copy from the secondary copies in the same cluster along the predefined order of succession or by an election protocol. If a partition failure occurs in the home cluster of a data item, we choose a replica as the primary copy from only the majority partition, as the viewstamped replication method [10] does, in order to have always only one primary copy in the entire system for each data item. The new primary copy selected is sure to have the latest value that reflects the results of all the updates on the data item which had been executed before the occurrence of the failure.

Our method adopts insular consistency that is relaxed from *ISR* and improves the availability of data for read-only transactions against network partition failures. It allows read-only transactions that can afford to read stale data values to read replicas other than the primary copies. In other words, even if the primary copy of a data item is inaccessible by site failures or network partition failures, a transaction that must read the data item can continue to execute by reading an accessible non-primary copy in the local cluster or in one of the other near clusters. Our method guarantees insular consistency among transactions by exploiting version vectors, which are defined in the next section.

3.2. Versions and Version Vectors

In our method, each write operation on a data item produces a new *version* of it. Each version of a data item has the unique *version number* with the data value. Whenever a new version is created, it is assigned a version number that sequentially increases by one. Many different versions of a data item may exist in a replicated database at the same time because of asynchronouse update propagation to tertiary copies, and their version numbers imply the order in which they were created. Primary and secondary copies always have the recent versions of data items.

Notation	*Meaning*
DS	$\{x \mid$ a replicated data item$\}$
$VS(x)$	$\{x_i \mid$ a version of the data item $x \in DS\}$
$VN(x_i)$	i, the version number of $x_i \in VS(x)$
$RS(T)$	a readset, $\{x \mid r[x]$ is in the transaction $T\}$
$WS(T)$	a writeset, $\{x \mid w[x]$ is in the transaction $T\}$
$V_r(T)$	$\{x_i \mid$ the version of $x \in RS(T)$, read by $T\}$
$V_w(T)$	$\{x_i \mid$ the new version of $x \in WS(T)$, written by $T\}$

Table 1. Notations

Table 1 shows the notations related to data items and their versions. We define four basic relations on versions as follows.

Definition 1 *4 basic relations on versions*

1. $\prec_{wr}$ *is a binary relation on the set of versions of data items, such that* $x_i \prec_{wr} y_j$ *iff* $x_i \in V_w(T_m) \cap V_r(T_n)$ *and* $y_j \in V_w(T_n)$ *for two different transactions* T_m *and* T_n.

2. $\prec_{ww}$ *is a binary relation on the set of versions of data items, such that* $x_i \prec_{ww} x_j$ *iff* $x_i \in V_w(T_m)$ *and* $x_j \in V_w(T_n)$ *for two different transactions* T_m *and* T_n, *and* x_i, x_j *are two versions of a data item* x *such that* $VN(x_j) = VN(x_i) + 1$.

3. $\prec_{rw}$ *is a binary relation on the set of versions of data items, such that* $x_i \prec_{rw} y_j$ *iff* $x_i \in V_w(T_m)$ *and* $y_j \in V_w(T_n)$ *for two different transactions* T_m *and* T_n, *and there exists* y_{j-1} *such that* $y_{j-1} \prec_{ww} y_j$ *and* $y_{j-1} \prec_{wr} x_i$.

4. $=_w$ *is a binary relation on the set of versions of data items, such that* $x_i =_w y_j$ *iff* $x_i, y_j \in V_w(T_n)$ *for a transaction* T_n.

Figure 3 depicts the above basic relations as graphs, which represent relationships among the versions that are read or written by update transactions. A node x_i denotes a version of a data item x. A directed edge from x_i to y_j which is labeled with T_k means that there exists a transaction T_k such that $x_i \in V_r(T_k)$ and $y_j \in V_w(T_k)$, and a directed edge into x_i which is labeled with T_k only means $x_i \in V_w(T_k)$. Since all update transactions executed on the primary copies are serializable in our method, these graphs describe the serializable executions of update transactions. The relations $\prec_{wr}$, $\prec_{ww}$, and $\prec_{rw}$ imply that there exist respectively a write-read conflict, a write-write conflict, and a

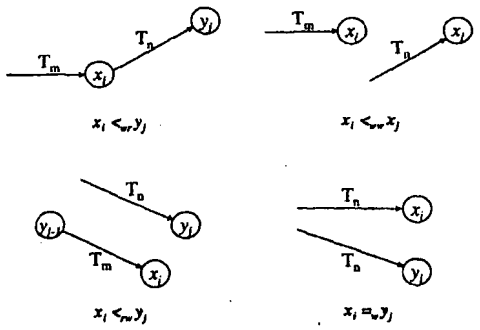


Figure 3. The basic relations on versions

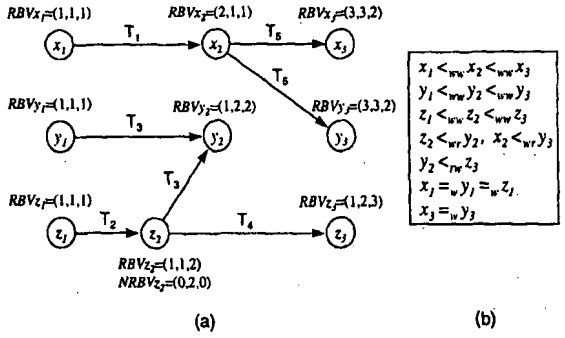


Figure 4. An example of RBV and $NRBV$

read-write conflict between two transactions, e.g., T_m and T_n in the figure, that created two related versions. So each of them determines a direct serialization order between T_m and T_n. The relation $=_w$ is an equivalent relation that means the creation of two versions of different data by an update transaction. Now, we define the following relation using the above four relations.

Definition 2 *$\preceq_{nf}$ is a relation which is defined by*

$$\preceq_{nf} \equiv \prec_{wr} \cup \prec_{ww} \cup \prec_{rw} \cup =_w$$

We denote the transitive closure of this relation as $\preceq^*_{nf}$. $x_i \preceq^*_{nf} y_j$ means that a transaction T_m that created x_i precedes a transaction T_n that created y_j *directly or indirectly* in a serialization order, or that x_i and y_j were created by the same transaction T.

A *version vector* is an ordered list of version numbers, in which a version number of a version for each data item is stored. For example, if n data items are replicated in a database, n version numbers, one for each data item, are stored in a version vector in a predefined order. There are two kinds of version vectors: *Read Bound Version Vector* and *Next Read Bound Version Vector.*

Definition 3 *Read Bound Version Vector(RBV)*
The Read Bound Version Vector of a version x_i is a version vector whose element for a data item y in DS is defined by

$$RBV_{x_i}[y]^2 = VN(y_j)$$

where $y_j \in VS(y)$, $y_j \preceq_{nf} x_i$, and there is no $y_k \in VS(y)$ such that $y_j \preceq^*_{nf} y_k$, $y_k \preceq^*_{nf} x_i$, and $y_k \neq y_j$.

RBV is defined for each version of a data item and is stored with each replica of the version. The version of y whose version number is $RBV_{x_i}[y]$ is the one that was created either by an update transaction that created x_i or by an update transaction that precedes the transaction that created x_i in the serialization order and most recently updated y. That means it is the oldest version of y that can be read with x_i in a read-only transaction while insular consistency is not violated. We call this version as *read bound version* of y for x_i. RBV stored with a replica is updated whenever a new version is created and stored in the replica, and it is used in the validation process of a read-only transaction.

Figure 4 shows an example of versions and their version vectors that are created and stored by some update transactions. In Figure 4-(a), the elements of version vectors are denoted in the order of x, y, and z. In this example, the basic relations on the versions exist as shown in Figure 4-(b). These relations determine the serialization order among the transactions and RBV of each version as shown in Figure 4-(a). For example, the serialization order among T_2, T_3, and T_5 is determined to $T_2 \rightarrow T_3 \rightarrow T_5$ by $z_2 \prec_{wr} y_2$ and $y_2 \prec_{ww} y_3$, and the values of $RBV_{y_2}[z]$ and $RBV_{y_3}[z]$ are set to 2, the version number of z_2. From the previously described meaning of the elements of RBV, these values imply that insular consistency is violated if y_2 or y_3 is read in a read-only transaction with a version of z that is older than z_2. For example, when a read-only transaction T_r reads y_2 and z_1, a cycle consisting of T_2, T_3, and T_r is generated in the serialization graph of committed transactions.

Definition 4 *Next Read Bound Version Vector(NRBV)*
Let V_c be the set of the most recent versions of all data items. The Next Read Bound Version Vector of x_c, the most recent version of a data item x, is a version vector whose element for a data item y is defined by

$$NRBV_{x_c}[y] \equiv max\{RBV_{z_c}[y]\}$$

for $\forall z_c \in V_c$ such that $x_c \prec_{wr} z_c$.

[2] In this paper, we index an element of a version vector by the name of a data item for convenience' sake.

$NRBV$ is defined for the most recent version of a data item and is stored with the primary and secondary copies of the data item. It is updated whenever the data item is read by an update transaction. $NRBV$ is an auxiliary version vector for RBV; when a new version is created, it is used in determining the value of a new RBV of the version. In the above definition, until the most recent version of x, x_c is updated to the next version, x_{c+1}, some necessary elements of RBV of z_c are stored in $NRBV$ of x_c on the ground that $x_c \prec_{wr} z_c$ directly induces $z_c \prec_{rw} x_{c+1}$. In Figure 4, for example, after T_3 reads z_2 and writes y_2, the update of z from z_2 into z_3 by T_4 induces $y_2 \preceq_{ru} z_3$. Since T_3 that created y_2 precedes T_4 that created z_3 in the serialization order, the read bound version of y for z_3 whose version number will be stored in $RBV_{z_3}[y]$ must be y_2. To reflect this fact when executing T_4 and computing RBV of z_3, we store in $NRBV_{z_2}[y]$ the version number of y_2 that was created by T_3 that read z_2, and then we make use of it later when determining the element of RBV of z_3.

3.3. Update Transactions

In this section, we describe how to manage version vectors when executing update transactions. An update transaction is issued from any client site and that site serves as the coordinator for the transaction. All read and write operations requested from the client site are transferred to and executed on the primary copies of the target data. A write operation is also transferred to the secondary copies of the data item in the home cluster. When all operations of an update transaction are issued and executed, the 2PC protocol starts at the client site with the participants, namely, all of the primary copies and the secondary copies that participated in the transaction. The additional computations to update version vectors at each site and the transmissions of necessary information between the client site and the participant site are included in the 2PC protocol as follows.

Phase 1: The client sends the PREPARE message to all the participants. The primary copy sites that can commit send the following data with the VOTE_COMMIT message to the client.

- RBVs of all the primary copies on which read or write operations were executed
- $NRBV$s of all the primary copies on which write operations were executed

After the client receives the VOTE_COMMIT messages from all the participants, it determines a new version vector $NewRBV$, which is defined by

$$NewRBV[x] = \begin{cases} RBV_{x_c}[x] + 1 & (\text{if } x_{c+1} \in V_w(T)) \\ max\{RBV_{y_c}[x], RBV_{z_c}[x], NRBV_{z_c}[x]\} & \\ for\ \forall y_c \in V_r(T)\ and & \\ \forall z_{c+1} \in V_w(T) & (\text{otherwise}) \end{cases}$$

where $x_c \prec_{ww} x_{c+1}$ and $z_c \prec_{ww} z_{c+1}$.

Phase 2: When the result of the transaction is determined to COMMIT at the client, it sends $NewRBV$ to all the participants with the COMMIT message. Each site that received the message updates RBV of the primary copy or a secondary copy as well as $NRBV$ of the primary copy as follows.

for $\forall x_c \in V_w(T)$ and $\forall y \in DS$
 $RBV_{x_c}[y] = NewRBV[y]$;
 $NRBV_{x_c}[y] = 0$;
for $\forall y_c \in V_r(T)$ such that $y_{c+1} \notin V_w(T)$ and $\forall y \in DS$
 $NRBV_{y_c}[y] = max\{NRBV_{y_c}[y],\ NewRBV[y]\}$;

Then the participant site sends an acknowledgment to the client and commits the transaction. The client finishes the 2PC protocol after it receives the acknowledgments from all the participants. Meanwhile, update propagation starts from each primary copy which was updated by this transaction to the tertiary copies contained in the other clusters. In this propagation, the new data value and the new RBV are sent, and a local update transaction is originated at each tertiary copy site. This update propagation is assured of being executed only once and within a finite period of time by an order-preserving and eventual delivery mechanism.

3.4. Read-only Transactions

In our method, all read operations in a read-only transaction can be executed on any replica. If all reads are executed on the primary copies, they always get the recent values of data by concurrency control processes in the primary copy sites. But if a read operation in a transaction is executed on a non-primary copy, the results of all read operations in the transaction must be validated before the transaction commits in order to guarantee the insular consistency criterion to be satisfied. Therefore, our strategy for executing a read-only transaction operates under the optimistic assumption that at least insular consistency can be mostly satisfied in the history consisting of it and other transactions. The validation rule for deciding whether a read-only transaction T_r can commit or not is as follows.

Validation Rule:
if for any two versions x_i and y_j in $V_r(T_r)$,
 $RBV_{x_i}[x] \geq RBV_{y_j}[x]$ and $RBV_{y_j}[y] \geq RBV_{x_i}[y]$

then commit T_r
else abort T_r

The condition in the above rule means that, for each version of a data item read in a read-only transaction, all versions of the other data items that were read with it are the same versions as the read bound versions of the data items in its RBV, or the later versions than them. In Figure 4, for example, we suppose a read-only transaction T_r that reads both y and z selects y_1 and z_3. Then $RBV_{y_1}[y] = 1$ and $RBV_{z_3}[y] = 2$ lead to $RBV_{y_1}[y] < RBV_{z_3}[y]$, and insular consistency is violated since a cycle $T_r \rightarrow T_3 \rightarrow T_4 \rightarrow T_r$ is generated in the history. On the other hand, if T_r chooses y_3 and z_1, $RBV_{z_1}[z] = 1$ and $RBV_{y_3}[z] = 2$ lead to $RBV_{z_1}[z] < RBV_{y_3}[z]$, and insular consistency is also violated because a cycle $T_r \rightarrow T_2 \rightarrow T_3 \rightarrow T_5 \rightarrow T_r$ is generated in the history. However, reading a pair of y_3 and z_3, or y_2 and z_3, or y_3 and z_2 in T_r satisfies the condition of the **Validation Rule**, and the transaction can commit with insular consistency maintained. If the results of a read-only transaction fail in the validation process, we should re-execute the transaction on other replicas after aborting it.

4. Proof of Correctness

The correctness criterion which is used in our replication method is insular consistency, which requires any history consisting of each read-only transaction and all update transactions should be one-copy serializable. In our method, all read and write operations in update transactions are executed first on the primary copies, so that all update transactions are guaranteed to be one-copy serializable by concurrency control processes in the primary copy sites. In this section, we prove that our method guarantees insular consistency for any execution of transactions by showing that a read-only transaction passed the **Validation Rule** of the previous section satisfies *ISR* with all update transactions.

Lemma 1 *for* $\forall x_i \in V_w(T_i)$, $\forall y_j \in V_w(T_j)$ *such that* $T_i, T_j \in H$ *and* $T_i \neq T_j$,

$$x_i \preceq^*_{nf} y_j \iff T_i \rightarrow^* T_j \in SG(H)^3$$

PROOF

(*If*) We can prove by the mathematical induction on the path length from T_i to T_j in $SG(H)$.

Basis of induction. If $T_i \rightarrow T_j \in SG(H)$, by the definition of the serialization graph, there must exist at least one of three conflicts, i.e., a write-read conflict, a read-write conflict, and a write-write conflict, between T_i and T_j.

[3] $SG(H)$ denotes the serialization graph[3] for a history H, and $T_i \rightarrow^* T_j \in SG(H)$ means that there exists a path from T_i to T_j in SG(H).

1. write-read conflict:
 There exists a version of a data item z, z_i, such that $z_i \in V_w(T_i) \cap V_r(T_j)$. $x_i =_w z_i$ and $z_i \prec_{wr} y_j$ infer $x_i \preceq^*_{nf} y_j$.
2. read-write conflict:
 There exist two versions of a data item z, i.e., z_{j-1} and z_j, such that $z_{j-1} \in V_r(T_i)$ and $z_j \in V_w(T_j)$. $z_{j-1} \prec_{ww} z_j$ and $z_{j-1} \prec_{wr} x_i$ infer $x_i \prec_{rw} z_j$, and it and $z_j =_w y_j$ subsequently infer $x_i \preceq^*_{nf} y_j$.
3. write-write conflict:
 There exist two versions of a data item z, i.e., z_i and z_{i+1}, such that $z_i \in V_w(T_i)$ and $z_{i+1} \in V_w(T_j)$. $x_i =_w z_i$, $z_i \prec_{ww} z_{i+1}$, and $z_{i+1} =_w y_j$ infer $x_i \preceq^*_{nf} y_j$.

Induction step. we suppose that $T_i \rightarrow^n T_j \in SG(H) \Longrightarrow x_i \preceq^*_{nf} y_j$ for any positive integer n. If $T_i \rightarrow^{n+1} T_j \in SG(H)$, there exists an update transaction T_k such that $T_i \rightarrow^n T_k \in SG(H)$ and $T_k \rightarrow T_j \in SG(H)$. By the above assumption and *Basis of induction*, $x_i \preceq^*_{nf} z_k$ and $z_k \preceq^*_{nf} y_j$ for $\forall z_k \in V_w(T_k)$. Therefore, we have $x_i \preceq^*_{nf} y_j$ from the transitiveness of the relation $\preceq^*_{nf}$.

(*Only if*) We can prove by the mathematical induction on the number of times of the relational products of $\preceq_{nf}$.

Basis of induction. if $x_i \preceq_{nf} y_j$, namely, $x_i \prec_{wr} y_j$ or $x_i \prec_{ww} y_j$ or $x_i \prec_{rw} y_j$, $T_i \rightarrow T_j \in SG(H)$ by the definition of the serialization graph and the meanings of the relations $\prec_{wr}$, $\prec_{ww}$, and $\prec_{rw}$.

Induction step. For any positive integer n, we let the n-th transitive extension of $\preceq_{nf}$ be $\preceq^n_{nf}$ and assume $x_i \preceq^n_{nf} y_j \Longrightarrow T_i \rightarrow^* T_j \in SG(H)$. If $x_i \preceq^{n+1}_{nf} y_j$, (1) $x_i \preceq^n_{nf} y_j$ or (2) there exists z_k satisfying $x_i \preceq^n_{nf} z_k$ and $z_k \preceq^n_{nf} y_j$. In the case of (1), by the above induction hypothesis, we have $T_i \rightarrow^* T_j \in SG(H)$. In the case of (2), by the above induction hypothesis, we have $T_i \rightarrow^* T_k \in SG(H)$ and $T_k \rightarrow^* T_j \in SG(H)$. Consequently, we have $T_i \rightarrow^* T_j \in SG(H)$. □

Theorem 1 *a read-only transaction* T_r *in* H *passes the* **Validation Rule** *if and only if the serialization graph of the sub-history* H_s, $SG(H_s)$, *consisting of* T_r *and all update transactions in* H *is acyclic.*

PROOF

(*If*) Suppose that T_r fails to satisfy the validation condition. Then, as Figure 5-(a) shows, there exist two versions, i.e., $x_i \in V_w(T_i)$ and $y_k \in V_w(T_k)$, such that $x_i, y_k \in V_r(T_r)$ but $RBV_{y_k}[x] = VN(x_j)$ where $x_j \in V_w(T_j)$ and $VN(x_i) < VN(x_j)$, that is, $RBV_{x_i}[x] < RBV_{y_k}[x]$. From $x_i \in V_r(T_r)$, we have

$$T_r \rightarrow T_j \qquad (1)$$

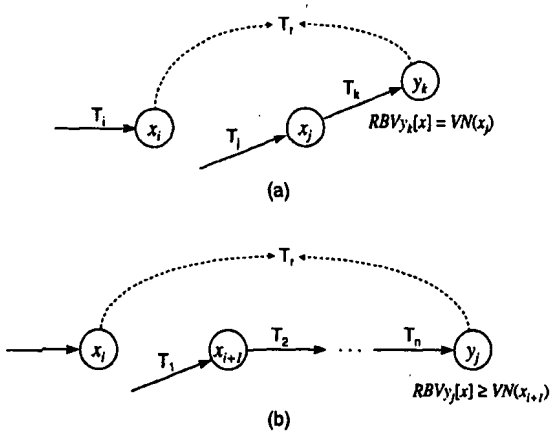


Figure 5. The proof of Theorem 1

$RBV_{y_k}[x] = VN(x_j)$ infers $x_j \preceq_p^* y_k$ by the definition of RBV, and by **Lemma 1** we have

$$T_j \rightarrow^* T_k \ \ or \ \ T_j = T_k \tag{2}$$

In addition, $y_k \in V_w(T_k) \cap V_r(T_r)$, namely, there exists a write-read conflict between T_k and T_r on y_k, so that we have

$$T_k \rightarrow T_r \tag{3}$$

From (1), (2), and (3), we have $T_r \rightarrow T_j \rightarrow^* T_k \rightarrow T_r$ or $T_r \rightarrow T_j (= T_k) \rightarrow T_r$. Hence, there exists a cyclic path in $SG(H_s)$, which is a contradiction.

(Only if) Suppose that there exists a cyclic path in $SG(H_s)$. Since the sub-history of all update transactions is one-copy serializable, T_r must be included in that cyclic path. Without loss of generality, let that cyclic path be $T_r \rightarrow T_1 \rightarrow \cdots \rightarrow T_n \rightarrow T_r$. From $T_r \rightarrow T_1$, there exists a data item x such that $x \in R - Set(T_r) \cap W - Set(T_1)$. As Figure 5-(b) shows, if we choose $x_i \in V_r(T_r)$ then $x_{i+1} \in V_w(T_1)$. From $T_n \rightarrow T_r$, there exists y_j such that $y_j \in V_w(T_n) \cap V_r(T_r)$. Since $T_1 \rightarrow^* T_n$, $x_{i+1} \preceq_p^* y_j$ by **Lemma 1**, and then by the definition of RBV, $RBV_{y_j}[x] \geq VN(x_{i+1}) = RBV_{x_i}[x] + 1$. Consequently, we have $RBV_{y_j}[x] > RBV_{x_i}[x]$ for $x_i, y_j \in V_r(T_r)$, so that T_r does not satisfy the validation condition, which is a contradiction. □

The above **Theorem 1** and the serializability theorem of [3] directly infer the next corollary.

Corollary 1 *If all read-only transactions in a history H pass the **Validation Rule**, H satisfies insular consistency.*

5. Discussion and Conclusion

In this paper, we proposed a replication method which is applicable to large-scale distributed database systems. While our method bases on the traditional primary copy method, it uses insular consistency as a correctness criterion for the execution of transactions. Moreover, It updates synchronously only the replicas in the cluster that contains the primary copy and then asynchronously propagates the update to the other replicas. Our method can improve data availability for read-only transactions more than other traditional methods can do.

We introduced the notion of version vectors to maintain in each replica the necessary information to guarantee insular consistency for execution of transactions. By integrating all necessary transmissions of information between sites into the general 2PC protocol, our method does not need any extra phase for exchanging messages related to version vectors during the execution of a transaction.

The characteristics of our method in regard of four important measures are discussed as follows.

- Consistency: Insular consistency is a correctness criterion that can be used more generally than other application-specific correctness criteria. It guarantees *ISR* for any execution of transactions including a read-only transaction and all update transactions. This implies the result of a read-only transaction is the values of data items in a database in a feasible consistent state. Using insular consistency can improve data availability for a read-only transaction by ignoring its relation with the other read-only transactions.

- Availability: Traditional replication methods guaranteeing *ISR* have a drawback that they degrade data availability when a network partition failure occurs. In our method using insular consistency, many read-only transactions that cannot be executed to the end with other replica control protocols because of a network partition failure can be executed and committed, so that data availability can be much improved.

 An update operation in an update transaction cannot be executed if the primary copy of a target data is inaccessible. That is a restriction of the primary copy method that guarantee *ISR*. While our method, having regard to update performance, uses the asynchronous update scheme for replicas out of the home cluster, it copes with a site failure of the primary copy by keeping the secondary copies in the home cluster equivalent to the primary copy. As we suppose in this paper, when more update requests are issued within the home cluster than from the other clusters, we can maintain update availability in the home cluster in a high degree as compared with that in the other clusters.

- Performance: By using an asynchronous update propagation scheme for replicas remote from the primary

copy, response time of transactions can be highly improved. On the other hand, throughput of transactions is closely related to data availability. Since our method improves data availability particularly for read-only transactions as mentioned above, it can also increase throughput of the system where read-only transactions are predominantly issued.

- Storage and communication cost: The additional data structures that are used for guaranteeing insular consistency like version vectors inevitably lead to an increase in the amount of storage and communication messages. Their overheads are as follows.

 1. Storage cost:
 The storage cost of version vectors in the primary copy is $O(2n)$ and that of a secondary or tertiary copy is $O(n)$, where n is the number of replicated data items.
 2. Communication cost of read-only transactions:
 The amount of the additional messages transmitted is $O(mn)$, where m is the average number of data items read by a read-only transaction.
 3. Communication cost of update transactions:
 When we denote the average numbers of read operations and write operations in the update transaction as r and w respectively, and denote the numbers of secondary copies and tertiary copies as s and t respectively, the amount of the additional messages transmitted at commit is as follows:

 cost in Phase 1 + cost in Phase 2 + cost of update propagation
 $= O(rn + 2wn) + O(wn(s + 1)) + O(nwt)$
 $= O(rn + 2wn + wnd)$

 where d is the average number of replicas of a data item, i.e., $d = s + t + 1$.

 As represented above, the storage and communication cost of our method depends on the number of replicated data items and the number of replicas. The number of replicated data items is closely related to the granularity of replication. Generally, it can be variously determined by applications, and our method is appropriate for a relatively coarse granularity such as a fragment or a relation. As for the number of replicas, a trade-off with data availability is needed.

On the other hand, our method can be incorporated with other traditional replica control protocols for improving data availability of read-only transactions against network partition failures.

As for further works, It is needed to define more practical and more useful correctness criteria to improve performance of data replication. In addition, considerations about scalability of a system are required to design a replication method for large-scale distributed systems.

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A replica control method for improving availability for rea transactions

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Abstract

Data replication is often considered in distributed database systems to enhance availabili The benefit of data replication, however can only be realized at the cost of maintaining th In particular, network partition failures make it more difficult to achieve high data availabil strong correctness criteria such as 1-copy serializability. We propose a replica control me availability of data in the presence of network partition failures. Our method extends the t copy method by using the relaxed correctness criterion called insular consistency for larg systems, where partition failures frequently occur. We focus on increasing the availability transactions. We introduce a version vector as a tool for guaranteeing insular consistenc mechanism that allows read-only transactions to be executed at any partition as long as i consistency is satisfied. An **asynchronous update** propagation mechanism is also empl performance of update operations. We also show that the proposed method is correct an performance considerations

Index Terms

Inspec

Controlled Indexing

data integrity database theory distributed databases **replicated databases** tolerance software performance evaluation transaction processing

Non-controlled Indexing

asynchronous update propagation mechanism correctness criteria data avai consistency data replication distributed database systems insular consistenc serializability large-scale distributed systems network partition failures perfor primary copy method read-only transactions replica control method version v

Author Keywords

Not Available

References

No references available on IEEE Xplore.

Citing Documents

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DATE: Wednesday, September 26, 2007 **Purge Queries** Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
	DB=EPAB,JPAB; PLUR=YES; OP=OR		
L55	(copy$ or mirror$ or snapshot$1) and (mismatch or mismatched) and database	26	L55
	DB=JPAB; PLUR=YES; OP=OR		
L54	(copy$ or mirror$ or snapshot$1) and (mismatch or mismatched) and database	26	L54
L53	L35 and (copy$ or mirror$ or snapshot$1) and (mismatch or mismatched)	0	L53
	DB=DWPI,TDBD; PLUR=YES; OP=OR		
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DB=USPT; PLUR=YES; OP=OR			
L48	("5403639")[URPN]	147	L48
L47	(5124987 \| 5287496 \| 5239659 \| 5193184 \| 5155835 \| 5212789 \| 5210866 \| 5247647 \| 4627019 \| 5278979)![PN]	10	L47
L46	("5403639")[PN]	1	L46
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L44	707.clas.	61410	L44
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L39	'5403639'.pn.	1	L39
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L37	L36 not @py>1997	29	L37
L36	L35 and (copy$ or mirror$ or snapshot$1) and (mismatch or mismatched)	927	L36
L35	(databases or data with bases) near access	33593	L35
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L33	711.clas.	36189	L33
L32	707.clas.	61410	L32
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L27	711/163	2841	L27
L26	711/162	3659	L26
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L23	707/500	1743	L23
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L15	'5832522'.pn.	1	L15

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L13	L12 and 707/204	3	L13
L12	L11 and display with content	424	L12
L11	information with registration with search	2049	L11
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L6	6085285.pn.	2	L6
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L4	'5765173'.pn.	1	L4
L3	'5903898'.pn.	1	L3
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L2	L1 and "mirroring" and "mismatch"	14	L2
L1	707/204	3990	L1

END OF SEARCH HISTORY

06473259/9 **Links**

Fulltext available through: ScienceDirect

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06473259 **INSPEC Abstract Number:** C9702-6160B-035

Title: Data replication in a distributed system: a performance study

Author San-Yih Hwang; Lee, K.K.S.; Chin, Y.H.

Author Affiliation: Dept. of Inf. Syst., Nat. Sun Yat-Sen Univ., Kaohsiung, Taiwan

Conference Title: Database and Expert Systems Applications. 7th International Conference, DEXA '96 Proceedings p. 708-17

Editor(s): Wagner, R.R.; Thoma, H.

Publisher: Springer-Verlag , Berlin, Germany

Publication Date: 1996 **Country of Publication:** Germany xv+921 pp.

ISBN: 3 540 61656 X **Material Identity Number:** XX96-03737

Conference Title: Database and Expert Systems Applications. 7th International Conference, DEXA '96 Proceedings

Conference Date: 9-13 Sept. 1996 **Conference Location:** Zurich, Switzerland

Language: English **Document Type:** Conference Paper (PA)

Treatment: Practical (P); Theoretical (T); Experimental (X)

Abstract: Investigates the performance issues of data replication in a loosely-coupled distributed database system, where a set of database servers are connected via a network. A database replication scheme called "replication with divergence", which allows some degree of divergence between the primary and the secondary copies of the same data object, is compared to two other schemes that, respectively, disallow replication and maintain all replicated copies consistently at all times. The impact of some tunable factors, such as cache size and the update propagation probability, on the performance of "replication with divergence" is also investigated. These results shed light on the performance issues that were not addressed in previous studies on the replication of distributed database systems. (9 Refs)

Subfile: C

Descriptors: database theory; file servers; replicated databases; software performance evaluation

Identifiers: data replication; loosely-coupled distributed database system; performance issues; database servers; divergence; database replication scheme; data object copies; tunable factors; cache size; update propagation probability

Class Codes: C6160B (Distributed databases); C4250 (Database theory)

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01511962/9 **Links**
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01511962 ORDER NO: AAD96-35903

PROTOCOLS FOR ACHIEVING CONSISTENCY AND RELIABILITY IN REPLICATED DATABASE SYSTEMS THAT UTILIZE ASYNCHRONOUS UPDATES

Author: CHUNDI, PARVATHI
Degree: PH.D.
Year: 1996
Corporate Source/Institution: STATE UNIVERSITY OF NEW YORK AT ALBANY (0668)
Source: Volume 5706B of Dissertations Abstracts International.
PAGE 3840 . 178 PAGES
Descriptors: COMPUTER SCIENCE
Descriptor Codes: 0984

Replication is used in distributed systems to achieve an acceptable level of availability and fault-tolerance. This thesis investigates the use of asynchronous updates (or deferred updates) to ensure replica consistency in distributed systems. The thesis consists of two parts. In the first part, we focus on the issue of consistency in a replicated database system that uses asynchronous updates to maintain replica consistency. In the second part, we focused on the primary-backup approach where asynchronous updates are used to ensure consistency of a fault-tolerant service.

To attain higher transaction throughput, several commercial distributed database systems support deferred update protocols for ensuring replica consistency. In the primary copy deferred update approach, each replicated data item is assigned a primary copy site. Typically, a transaction explicitly updates only the primary copy of each data item: the updates to other copies are deferred until after the transaction commits. After a transaction commits, its updates to primary copies are sent transactionally to the other sites containing secondary copies. We investigate the transaction model underlying the primary copy approach, focusing on when it guarantees serializable global histories. We identify and formalize protocols that implement this approach and obtain a tight characterization of global serializability based on the topology of data distribution. We use this characterization to develop a polynomial time algorithm for the problem of assigning primary sites to data items so that the resulting data distribution topology ensures serializability. We also present an efficient algorithm that (if possible) assigns transactions to sites and selects primary sites for data items, such that the resulting topology ensures serializability and each transaction is assigned to a site where all its access can be satisfied.

In the second part of this thesis, we develop new primary-backup protocols that are minimal with respect to degree of replication. In the primary-backup approach, a fault-tolerant service is implemented using a collection of servers. One of the servers functions as the primary while the others function as backups. Clients send their service request to the primary. When the primary fails, one of the backups takes over as the primary. We consider the primary-backup approach under a model in which the clients play an active role when their service requests ar not fulfilled. Each client maintains an ordered list of servers and sends its service requests to the first server in its list. If the server does not respond within a specified timeout period, the client retransmits the request to the next server in its list. Under this active client model, we construct protocols that tolerate crash failures, send-omission and receive-omission failures. For each type of failure, our protocols tolerate up to f server failures using only f + 1 servers. In addition, these protocols tolerate an arbitrary number of client failures. Further, the protocols ensure that the service provided by the system is functionally equivalent to that provided by a single failure-free server.

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S7     106390   (ATTRIBUTE? OR CHARACTERISTIC? OR FORMAT)(7N)(CONTENT? ? OR DATA OR INFO
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475
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256, 474, 475, 583, 23, 139, 56
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S13        50   S12 AND S5 FROM 2, 35, 65, 99, 256, 474, 475, 583, 23, 139, 56
S14        20   S13 AND S6 FROM 2, 35, 65, 99, 256, 474, 475, 583, 23, 139, 56
S15         1   S14 AND S7 FROM 2, 35, 65, 99, 256, 474, 475, 583, 23, 139, 56
S16         1   S15 AND S8 FROM 2, 35, 65, 99, 256, 474, 475, 583, 23, 139, 56
S17         2   S S12 AND S9
S18        17   RD S14  (unique items)
S19         1   S S15 OR S16

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17/3,K/1 (Item 1 from file:2) **Links**

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08397915 **INSPEC Abstract Number:** A2002-22-8760B-046, B2002-11-7510H-058, C2002-11-7330-156

Title: Intensity-based image registration for 3D spatial compounding using a freehand 3D ultrasound system

Author Pagoulatos, N.; Haynor, D.R.; Kim, Y.

Author Affiliation: Dept. of Electr. Eng., Washington Univ., Seattle, WA, USA

Journal: Proceedings of the SPIE - The International Society for Optical Engineering **Conference Title:** Proc. SPIE - Int. Soc. Opt. Eng. (USA) vol.4687 p. 438-49

Publisher: SPIE-Int. Soc. Opt. Eng ,

Publication Date: 2002 **Country of Publication:** USA

CODEN: PSISDG **ISSN:** 0277-786X

SICI: 0277-786X(2002)4687L.438:IBIR;1-0

Material Identity Number: C574-2002-207

U.S. Copyright Clearance Center Code: 0277-786X/02/$15.00

Conference Title: Medical Imaging 2002: Ultrasonic Imaging and Signal Processing

Conference Sponsor: SPIE

Conference Date: 26-28 Feb. 2002 **Conference Location:** San Diego, CA, USA

Language: English

Subfile: A B C

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Abstract: ...the final compounded image. We have developed a new automatic method for rigid and deformable **registration** of 3D US **data** sets, acquired using a freehand 3D US system. Deformation is provided by using a 3D. ...registration and spatial compounding methods: (i) we only perform one 3D US reconstruction, for the **first** acquired **data set**, therefore we **save** the computation time required to reconstruct subsequent acquired scans, (ii) for our registration we use...

17/3,K/2 (Item 2 from file:2) **Links**
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06483117 **INSPEC Abstract Number:** C9703-7440-038
Title: Electronic document management in construction using auto-ID
Author Finch, E.F.; Flanagan, R.; Marsh, I.E.
Author Affiliation: Dept. of Constr. Manage. & Eng., Reading Univ., UK
Journal: Automation in Construction vol.5, no.4 p313-21
Publisher: Elsevier ,
Publication Date: Oct. 1996 **Country of Publication:** Netherlands
CODEN: AUCOES **ISSN:** 0926-5805
SICI: 0926-5805(199610)5:4L.313:EDMC;1-D
Material Identity Number: P716-97001
U.S. Copyright Clearance Center Code: 0926-5805/96/$15.00
Language: English
Subfile: C
Copyright 1997, IEE
Abstract: ...construction process. Despite the widespread use of computers for the ration of project information, hard **copy** documentation remains the**primary** method of information**transfer** within the construction industry. Electronic Document Management (EDM) systems offer a levelof control over... ...performance of EDM systems in two respects: (1) they requirethe user to re-enter **information** to **register** incoming documents into a**data base**; (**2**) they cannot interpret and manipulate information contained in or supporting the document. This paper describes ...

? t /3,k/all

18/3,K/1 (Item 1 from file:2) **Links**
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10084849
Title: A probabilistic certificate updating protocol for MANET
Author Dongqing Xie; Han Zhou
Author Affiliation: Dept. of Comput. Sci. & Math., Nipissing Univ., North Bay, Ont., Canada
Conference Title: Proceedings. 20th International Conference on Advanced Information Networking and Applications p. 5 pp.
Publisher: IEEE computer Society ,Los Alamitos, CA, USA
Publication Date: 2006 **Country of Publication:** USA CD-ROM pp.
ISBN: 0 7695 2466 4 **Material Identity Number:** XX-2006-00750
U.S. Copyright Clearance Center Code: 1550-445X/06/$20.00
Conference Title: Proceedings. 20th International Conference on Advanced Information Networking and Applications

Conference Date: 18-20 April 2006 **Conference Location:** Vienna, Austria
Language: English
Subfile: B
Copyright 2006, The Institution of Engineering and Technology
Abstract: ...based on probabilistic reliable multicast. The newscheme includes two parts: (1) transmission of the **update information based** on probabilistic reliable multicast; (2) the distributed **update** request service. In the **first** part after the node has created the **update information**, it **first** selects some reliable nodes from its local certificate repository which has already had someroute information in the local route table, then multicasts the **update information** to selected nodes. In the **second** part, after having finished the transmission, the node that has not received the new **update information** can get the certificate **update** service from the node that has received the **update information** instead of the certificate issuer itself. It fully makes use of the existing route information...

18/3,K/2 (Item 2 from file:2) **Links**
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08205110 **INSPEC Abstract Number:** C2002-04-6130-009
Title: The effect of local sort on parallel sorting algorithms
Author Jimenez-Gonzalez, D.; Navarro, J.J.; Larriba-Pey, J.-L.
Author Affiliation: Dept. d'Arquitectura de Computadors, Univ. Politecnicade Catalunya, Barcelona, Spain
Conference Title: Proceedings 10th Euromicro Workshop on Parallel, Distributed and Network-based Processing p. 360-7
Editor(s): Vajda, F.; Podhorszki, N.
Publisher: IEEE Comput. Soc , Los Alamitos, CA, USA
Publication Date: 2002 **Country of Publication:** USA xii+480 pp.
ISBN: 0 7695 1444 8 **Material Identity Number:** XX-2002-00135
U.S. Copyright Clearance Center Code: 1066-6192/02/$17.00
Conference Title: Proceedings 10th Euromicro Workshop on Parallel, Distributed and Network-based Processing
Conference Date: 9-11 Jan. 2002 **Conference Location:** Canary Islands, Spain
Language: English
Subfile: C
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Abstract: ...the importance of sequential sorting in the context of in-memory parallel sorting of large **data sets** of 64-bit keys. **First**, we analyze several sequential strategies, like Straight Insertion, Quick sort, Radix sort and Cache-Conscious... ...algorithms analyzed and other new ideas. There are three important contributions in SCS-Radix sort: **first**, the work **saved** by detecting **data** skew dynamically; **second**, the exploitation of the memory hierarchy done by the algorithm; and third, the execution time ..

18/3,K/3 (Item 3 from file:2) **Links**
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06601679 **INSPEC Abstract Number:** C9707-1230-096
Title: Updating knowledge bases with disjunctive information
Author Yan Zhang; Foo, N.Y.
Author Affiliation: Dept. of Comput., Univ. of Western Sydney, Kingswood, NSW, Australia
Conference Title: Proceedings of the Thirteenth National Conference on Artificial Intelligence and the Eighth Innovative Applications of Artificial Intelligence Conference **Part** vol.1 p. 562-8 vol.1
Publisher: MIT Press , Cambridge, MA, USA
Publication Date: 1996 **Country of Publication:** USA 2 vol. xx+xii+1600 pp.
ISBN: 0 262 51091 X **Material Identity Number:** XX96-02091
Conference Title: Proceedings of National Conference on Artificial Intelligence
Conference Sponsor: AAAI
Conference Date: 4-8 Aug. 1996 **Conference Location:** Portland, OR, USA
Language: English
Subfile: C
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Title: Updating knowledge bases with disjunctive information
Abstract: ...methods, e.g. the possible models approach (PMA) of Winslett (1988), are generally problematic for updating knowledge bases with disjunctive information. In this paper, we propose two different approaches to deal with this problem-one is... ...the second is model-theoretic. We show that these two approaches are equivalent for propositional knowledge base updates, and the second method is also appropriate for first-order knowledge base updates. We then prove that our new update approaches still satisfy the standard Katsuno and Mendelzon...
Identifiers: first-order knowledge base updates;

18/3,K/4 (Item 4 from file:2) **Links**
Fulltext available through: ScienceDirect
INSPEC
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06473259 **INSPEC Abstract Number:** C9702-6160B-035
Title: Data replication in a distributed system: a performance study
Author San-Yih Hwang; Lee, K.K.S.; Chin, Y.H.
Author Affiliation: Dept. of Inf. Syst., Nat. Sun Yat-Sen Univ., Kaohsiung, Taiwan
Conference Title: Database and Expert Systems Applications. 7th International Conference, DEXA '96 Proceedings p. 708-17
Editor(s): Wagner, R.R.; Thoma, H.
Publisher: Springer-Verlag , Berlin, Germany
Publication Date: 1996 **Country of Publication:** Germany xv+921 pp.
ISBN: 3 540 61656 X **Material Identity Number:** XX96-03737
Conference Title: Database and Expert Systems Applications. 7th International Conference, DEXA '96 Proceedings
Conference Date: 9-13 Sept. 1996 **Conference Location:** Zurich, Switzerland
Language: English
Subfile: C
Copyright 1997, IEE
Abstract: Investigates the performance issues of data replication in a loosely-coupled **distributed database** system, where a set of database servers are connected via a network. A database replication scheme called "replication with divergence", which allows some degree of divergence between the **primary** and the secondary **copies** of the same **data** object, is compared to two other schemes that, respectively, disallow replication and maintain all replicated... ...on the performance issues that were not addressed in previous studies on the replication of **distributed database** systems.
Identifiers: ...loosely-coupled **distributed database** system... ...**data** object **copies**;

18/3,K/5 (Item 5 from file:2) **Links**
Fulltext available through: ScienceDirect
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06242648 **INSPEC Abstract Number:** C9605-6160B-038
Title: Deferred updates and data placement in distributed databases
Author Chundi, P.; Rosenkrantz, D.J.; Ravi, S.S.
Author Affiliation: Dept. of Comput. Sci., State Univ. of New York, Albany, NY, USA
Conference Title: Proceedings of the Twelfth International Conference on Data Engineering (Cat. No.96CB35888)
p. 469-76
Editor(s): Su, S.Y.W.
Publisher: IEEE Comput. Soc. Press , Los Alamitos, CA, USA
Publication Date: 1996 **Country of Publication:** USA xx+678 pp.
ISBN: 0 8186 7240 4 **Material Identity Number:** XX96-00892
U.S. Copyright Clearance Center Code: 1063-6382/96/$5.00
Conference Title: Proceedings of the Twelfth International Conference on Data Engineering
Conference Sponsor: IEEE Comput. Soc. Tech. Committee on Data Eng
Conference Date: 26 Feb.-1 March 1996 **Conference Location:** New Orleans, LA, USA
Language: English
Subfile: C
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Title: Deferred updates and data placement in distributed databases
Abstract: Commercial distributed database systems generally support an optional protocol that provides loose consistency of replicas, allowing replicas to be inconsistent for sometime. In such a protocol, each replicated data item is assigned a primary copy site. Typically, a transaction updates only the primary copies of data items, with updates to other copies deferred until after the transaction commits. After a transaction commits, its updates to primary copies are sent transactionally to the other sites containing secondary copies. We investigate the transaction model underlying the above protocol. We show that global serializability in such a system is a property of the placement of primary and secondary copies of replicated data items. We present a polynomial time algorithm to assign primary sites to data items so...
Identifiers: ...primary copy site... ...primary copies; secondary copies;

18/3,K/6 (Item 6 from file:2) **Links**
Fulltext available through: USPTO Full Text Retrieval Options
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05925991 **INSPEC Abstract Number:** A9509-8745-021
Title: Time-frequency analysis of postural sway
Author Schumann, T.; Redfern, M.S.; Furman, J.M.; El-Jaroudi, A.; Chaparro, L.F.
Author Affiliation: Human Motion Anal. Lab., Pittsburgh Univ., PA,USA
Journal: Journal of Biomechanics vol.28, no.5 p. 603-7

Publication Date: May 1995 **Country of Publication:** UK
CODEN: JBMCB5 **ISSN:** 0021-9290
U.S. Copyright Clearance Center Code: 0021-9290/95/$9.50+.00
Language: English
Subfile: A
Copyright 1995, IEE
Abstract: ...experiments were used to verify the usefulness of the spectral estimator for the analysis of **COP**. The **first data set** contains **COP** recorded from normal subjects swaying about their ankles in response to a metronome as it... ...distribution reveals time-varying spectral changes corresponding to frequency changes made by the subjects. The **second** set consists of **COP** from normal subjects and vestibularly impaired patients standing quietly on a force plate with eyes... ...100 s. The time-frequency distributions for the COP were estimated for both sets of **data**. The **COP**'s appear to be nonstationary with the energies at a given frequency modulating through time.

18/3,K/7 (Item 7 from file:2) **Links**

Fulltext available through: USPTO Full Text Retrieval Options

INSPEC
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04392589 **INSPEC Abstract Number:** B89044162, C89037930

Title: Pessimistic quasipartitioning protocols for distributed database systems

Author Lilien, L.; Chung, T.M.
Author Affiliation: Dept. of Electr. Eng. & Comput. Sci., Illinois Univ., Chicago, IL, USA

Journal: IEEE Journal on Selected Areas in Communications vol.7, no.3 p. 341-53

Publication Date: April 1989 **Country of Publication:** USA
CODEN: ISACEM **ISSN:** 0733-8716
U.S. Copyright Clearance Center Code: 0733-8716/89/0400-0341$01.00
Language: English
Subfile: B C

Title: Pessimistic quasipartitioning protocols for distributed database systems

Abstract: A communication link failure can result in a network partitioning that fragments a distributed database system into isolated parts. If a severed high-speed link (e.g. satellite link) between...
...quasipartitioned databases are proposed. The protocols are pessimistic in that they permit transactions to be updated in exactly one partition. The first protocol is defined for a fully partition-replicated database in which every partition contains a copy of every data object. The second protocol is defined for a partially partition-replicated database in which some objects have no...

Identifiers: ...distributed database systems

18/3,K/8 (Item 8 from file:2) **Links**
Fulltext available through: USPTO Full Text Retrieval Options
INSPEC
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02998708 **INSPEC Abstract Number:** C83010630
Title: Mathematical implementation of the statistical analysis of aerial photographs of forest
Author Ivanov, V.A.; Ivanchenko, G.A.
Journal: Avtometriya no.4 p. 34-40

Publication Date: July-Aug. 1982 **Country of Publication:** USSR
CODEN: AVMEBI **ISSN:** 0320-7102
Translated in: Optoelectronics, Instrumentation and Data Processing
Country of Publication: USA
CODEN: OIDPE4 **ISSN:** 8756-6990
Language: Russian
Subfile: C
Abstract: ...Nesterikhin (see ibid. vol.4, (1980)). It is divided into two groups of programs; the **first** group **transfers** photographic **data** onto disc files; the **second** processes the **data files**. The tree population is modelled as a Poissonian distribution, and distribution parameters can be fitted...

18/3,K/9 (Item 1 from file:35) **Links**
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01698949 ORDER NO: AAD99-25436

FUZZY LOGIC BASED REGRESSION MODELS OF FLIP-CHIP BONDING PROCESSES

Author: SCHAIBLE, BRIAN ROBERT
Degree: PH.D.
Year: 1999
Corporate Source/Institution: UNIVERSITY OF COLORADO AT BOULDER (0051)
Source: Volume 6004B of Dissertations Abstracts International.
PAGE 1820 . 328 PAGES

...can be used to improve the global accuracy of empirical models when only impoverished example **data sets** are available. **Second**, partial knowledge can be used to improve the success of model transfer efforts. Model transfer... ...new, similar task.

In order to study and demonstrate some of the modeling and model **transfer** concepts, both simulated and experimental **data** are used. The experimental data were obtained during the course of an experimental study of... ...to the study of the fuzzy logic based regression models and their application to model **transfer** problems. This is not the **first** use of these models, but it maybe the most comprehensive study of the use partial knowledge with them. Included in this study is the development of four different model **transfer** methods.

Secondary contributions include the development and fabrication of a new longitudinal thermosonic flip-chip bonding machine...

18/3,K/10 (Item 2 from file:35) **Links**

Dissertation Abs Online

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01511962 ORDER NO: AAD96-35903

PROTOCOLS FOR ACHIEVING CONSISTENCY AND RE LIABILITY IN REPLICATED DATABASE SYSTEMS THAT UTILIZE ASYNCHRONOUS UPDATES

Author: CHUNDI, PARVATHI

Degree: PH.D.
Year: 1996
Corporate Source/Institution: STATE UNIVERSITY OF NEW YORK AT ALBANY (0668)
Source: Volume 5706B of Dissertations Abstracts International.
PAGE 3840 . 178 PAGES

...we focus on the issue of consistency in a replicated database system that uses asynchronous **updates** to maintain replica consistency. In the **second** part, we focused on the **primary**-backup approach where asynchronous **updates** are used to ensure consistency of a fault-tolerant service.

To attain higher transaction throughput, several commercial **distributed database** systems support deferred update protocols for ensuring replica consistency. In the **primary copy** deferred **update** approach, each replicated **data** item is assigned a **primary copy** site. Typically, a transaction explicitly **updates** only the primary **copy** of each **data** item: the **updates** to other **copies** are deferred until after the transaction commits. After a transaction commits, its **updates** to **primary copies** are sent transactionally to the other sites containing **secondary copies**. We investigate the transaction model underlying the **primary copy** approach, focusing on when it guarantees serializable global histories. We identify and formalize protocols that... ...One of the servers functions as the primary while the others function as backups. Clients **send** their service request to the **primary**. When the primary fails, one of the backups takes over as the primary. We consider... ...their service requests ar not fulfilled. Each client maintains an ordered list of servers and **sends** its service requests to the **first** server in its list. If the server does not respond within a specified timeout period...

18/3,K/11 (Item 3 from file:35) **Links**
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01382143 ORDER NO: AAD94-30829

VIEWING THINGS IN A DIFFERENT SHADE: THEMATIC AND STRUCTURAL UNITY IN THE EARLY JOURNALS OF JAMES BOSWELL (THEMATIC UNITY, BOSWELL, JAMES)

Author: GILBERT, SHARON LYNN
Degree: PH.D.
Year: 1994
Corporate Source/Institution: THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL (0153)
Source: Volume 5507A of Dissertations Abstracts International.
PAGE 1966 . 260 PAGES

...Journal's central organizing principle whenever his view of life altered. In each structure, form **mirrors content** and Boswell's central organizing principle is unique.

Boswell organized the London Journal around densely.. ...illuminated by Victor Turner's theories of liminal states.

Returning to Britain, Boswell fashioned his **second** London Journal as an **inventory mirroring** his **first** London Journal. He thus created unity within the Journal itself, as well as among all...

18/3,K/12 (Item 4 from file:35) **Links**
Dissertation Abs Online
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744752 ORDER NO: AAD81-09499
CONCURRENT UPDATE PROBLEM AND SYNCHRONIZATION IN DISTRIBUTE D DATA BASE SYSTEMS

Author: RAHIMI, SAEED KHAMENE
Degree: PH.D.
Year: 1980
Corporate Source/Institution: UNIVERSITY OF MINNESOTA (0130)
Source: Volume 4111B of Dissertations Abstracts International.
PAGE 4186 . 291 PAGES
CONCURRENT UPDATE PROBLEM AND SYNCHRONIZATION IN DISTRIBUTE D DATA BASE SYSTEMS

This thesis studies the concurrency control problem associated with distributed data base systems.

A distributed data processing environment is an environment in which hardware components, as well as software resources... ...or, "maintaining mutual consistency among the copies", is raised. Also since there are usually multiple update requests against a set of data, the "internal consistency" of the data base is threatened.

Much research has been done, in... ...proposes a new solution, the Posted Update Algorithm, PUA {RAHI79}.

To study the behavior of update algorithms in a distributed data base system, the thesis presents models formed by using queueing theoretic and simulation models. The behavior... ...to identify different types of failures, their detection mechanisms, recovery mechanisms, and restart algorithms in distributed database systems.

In summary, the thesis consists of three separate parts. In the first part it presents a new update algorithm PUA. In the second part it develops new models for distributed data base systems, and in the last part it studies the robustness of update algorithms PUA, DVA...

18/3,K/13 (Item 1 from file:583) **Links**
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03108050
DEVELOPMENT OF ETEBAC COMMUNICATION PROTOCOL

FRANCE - DEVELOPMENT OF ETEBAC COMMUNICATION PROTOCOL
Zero Un Informatique Hebdomadaire (ZH) 1 December 1989 p44-45
Language: French

...been promoted by the CFNOB, a French committee for organising and standardising banking procedures. Etebac 2, which allows the **transfer** of **data files** from banks to their clients via the telephone network, is fairly widely used by the... ...an electronic key system (RSA) ensures the identification of users and the confidentiality of the **data transferred**. At **first**, Etebac 5 will only be used by lage companies, but not with large computer systems...

18/3,K/14 (Item 1 from file:23) **Links**
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0007139574 IP Accession No: 200514-81-30966; 200514-32-25333; 200514-17-45909
Optical performance analysis and optimization of large telescope structural designs

Roberts, Scott; Sun, Simon; Kerley,Dan
Proc. SPIE , v SPIE-5867 , p 200-211
Publication Date: 2005

Conference:
Optical Modeling and PerformancePredictions , San Diego, CA , USA, 3-4 Aug. 2005

Document Type: Conference Paper; Journal Article
Record Type: Abstract
Language: English
ISSN: 0277-786X
ISBN: 0819458724
Report No: SPIE-5867
File Segment: Computer & Information Systems Abstracts; Electronics & Communications Abstracts; Solid State & Superconductivity Abstracts

Abstract:
...tool to analyze the effects of gravity induced deflections on a telescope structure with segmented **primary mirror** optics. An objective of the telescope structural design process is to minimize image quality degradation... ..under gravity, while ensuring that the overall system meets several requirements including limits of maximum **primary mirror** actuator stroke, segment rotation and decenter, and **secondary mirror** actuation. These design and performance criteria are not readily calculated within a finite element program... ...difference at the pupil, RMS wavefront, encircled energy and low order Zernike terms resulting from **primary mirror** segment rotation and decenter. Also reported are the maximum actuator strokes required to restore tip-tilt and piston of the **primary mirror** segments, and the deflection of the **secondary mirror** under gravitational load.The merit function routine is being used by the Thirty Meter Telescope...

Descriptors: Mathematical models; Mathematical analysis; Telescopes; **Primary mirrors**; Matlab; Structural design; Optical; Finite element method; Deflection; Actuators; **Data base** management systems; **Secondary mirrors**; Gravitation; Thermomechanical treatment; Databases

18/3,K/15 (Item 2 from file:23) **Links**
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0005199690 IP Accession No: 0274808
Updating knowledge bases with disjunctive information

Zhang, Yan; Foo, Norman Y Univ of Western Sydney,Kingswood, Aust
Pages: 562-568
Publication Date: 1996
Publisher: AAAI, MENLO PARK, CA, (USA)

Conference:
The 1996 13th National Conference on Artificial Intelligence,AAAI 96. Part 1 (of 2) , Portland, OR , USA , 04-08 Aug. 1996

Document Type: Conference Paper
Record Type: Abstract
Language: English
File Segment: Computer & Information Systems Abstracts
Updating knowledge bases with disjunctive information

Abstract:
...shown that conventional minimal change methods, eg. the PMA (Winslett 1988), are generally problematic for updating knowledge bases with disjunctive information. In this paper, we propose two different approaches to deal with this problem - one is... ...the second is model-theoretic. We show that these two approaches are equivalent for propositional knowledge base updates, and the second method is also appropriate for first order knowledge base updates. We then prove that our new update approaches still satisfy the standard Katsuno and Mendelzon...

18/3,K/16 (Item 3 from file:23) **Links**
Fulltext available through: ScienceDirect
CSA Technology Research Database
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0004567422 IP Accession No: 0110669

Geothermal resource evaluation for the eastern united states based on heat flow and thermal conductivity distribution

Blackwell, David D; Steele, John L; Carter, Larry SSouthern Methodist Univ, Dallas,TX, USA
Pages: 97-100
Publication Date: 1993
Publisher: GEOTHERMAL RESOURCES COUNCIL, DAVIS, CA, (USA)

Conference:
The 1993 Annual Meeting on Utilities and Geothermal: An Emerging Partnership, Burlingame, CA, USA, 10/10-13/93

Document Type: Conference
Record Type: Abstract
Language: English
ISBN: 0-934412-71-5
File Segment: Environmental Engineering Abstracts

Abstract:
...and eastern United States in usefulformats. The specific results described in this paper are,**first**, an **updated** heat flow **data base**, and **second**, a series of digital **data bases** for the central and eastern United States (the region of 25 degree to 50 degree...

18/3,K/17 (Item 4 from file:23) **Links**
Fulltext available through: ScienceDirect
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0002163409 IP Accession No: N82-21200
Experimental investigation of turbine endwall heat transfer. Volume 2: Linear and annular cascade summary data sets [Final Report, 1 Aug. 1977 - 31 Aug. 1981]

HYLTON, L D; MIHELC, M S; TURNER, E R; YORK, R E
Pages: 329P
Publication Date: 1981
Publisher: Wright-Patterson AFB, Ohio: AFWAL

Conference:
, United States

Document Type: Report
Record Type: Abstract
Language: English
Report No: AD-A110333; DDA-EDR-10363-VOL-2; AFWAL-TR-81-2077-VOL-2; Pagination 329P
Numbers: Contract: F33615-77-C-2030; AF PROJ. 3066
File Segment: Aerospace & High Technology
Experimental investigation of turbine endwall heat transfer. Volume 2: Linear and annular cascade summary data sets [Final Report, 1 Aug. 1977 - 31 Aug. 1981]

Abstract:
Two turbine cascades were tested at simulated engine conditions to provide a data base of endwall heat transfer data. This data base is intended to be sufficiently complete to provide verification data for refined computational models developed to predict first-stage stator endwall heat transfer in advanced turbine engines. Summary plots of the results of both the linear and the...

Descriptors: *Annular flow; *Cascade flow; *Flow measurement; *Gas turbine engines; *Heat transfer; *Tables (data); *Wall flow; Flow distribution ; Linearity; Mach number; Pressure gradients; Temperature gradients; Turbulence

? t /3,k/all

19/3,K/1 (Item 1 from file:2) **Links**
Fulltext available through: ScienceDirect
INSPEC
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08205110 **INSPEC Abstract Number:** C2002-04-6130-009
Title: The effect of local sort on parallel sorting algorithms
Author Jimenez-Gonzalez, D.; Navarro, J.J.; Larriba-Pey, J.-L.
Author Affiliation: Dept. d'Arquitectura de Computadors, Univ. Politecnicade Catalunya, Barcelona, Spain
Conference Title: Proceedings 10th Euromicro Workshop on Parallel, Distributed and Network-based Processing p. 360-7
Editor(s): Vajda, F.; Podhorszki, N.
Publisher: IEEE Comput. Soc , Los Alamitos, CA, USA
Publication Date: 2002 **Country of Publication:** USA xii+480 pp.
ISBN: 0 7695 1444 8 **Material Identity Number:** XX-2002-00135
U.S. Copyright Clearance Center Code: 1066-6192/02/$17.00
Conference Title: Proceedings 10th Euromicro Workshop on Parallel, Distributed and Network-based Processing
Conference Date: 9-11 Jan. 2002 **Conference Location:** Canary Islands, Spain
Language: English
Subfile: C
Copyright 2002, IEE
Abstract: ...the importance of sequential sorting in the context of in-memory parallel sorting of large **data sets** of 64-bit keys. **First**, we analyze several sequential strategies, like Straight Insertion, Quick sort, Radix sort and Cache-Conscious... ...algorithms analyzed and other new ideas. There are three important contributions in SCS-Radix sort: **first**, the work **saved** by detecting **data** skew dynamically; **second**, the exploitation of the memory hierarchy done by the algorithm; and third, the execution time stability of SCS-Radix when sorting **data** sets with **different characteristics**. We evaluate the use of SCS-Radix sort in the context of a parallel sorting...
Identifiers: ...**data** set **characteristics**;

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[File 9] **Business & Industry(R)** Jul/1994-2007/Aug 28
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[File 476] **Financial Times Fulltext** 1982-2007/Sep 02
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File 624: Homeland Security & Defense and 9 Plat energy journals added Please see HELP NEWS624 for more

[File 634] **San Jose Mercury** Jun 1985-2007/Aug 30
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[File 625] **American Banker Publications** 1981-2007/Aug 29
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[File 268] **Banking Info Source** 1981-2007/Aug W2
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[File 626] **Bond Buyer Full Text** 1981-2007/Aug 30
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[File 267] **Finance & Banking Newsletters** 2007/Aug 20
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[File 348] **EUROPEAN PATENTS** 1978-2007/ 200734
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OPERATION OR ACTION OR SERVICE? ?)
S11        435   S AU=(SUGIYAMA, M? OR SUGIYAMA M? OR SUGIYAMA(2N)M?)
S12          0   S S11 AND S1
S13          1   S S11 AND S2
S14          6   S S11 AND S8
S15         44   S S1(5N)S2
S16          5   S S15(7N)S3
S17          5   S S16 NOT (S14 OR S13)
S18          1   S S15(7N)(S4:S5)
S19          1   S S18 NOT S17
S20       5237   S (S1:S3)(7N)(S4:S5)
S21       2094   S S20(3N)S6
S22         70   S S21(7N)S7
S23          8   S S22(7N)S8
S24          5   S S22(7N)S9
S25          4   S S22(7N)S10
```

t /3,k/all

13/3K/1 (Item 1 from file: 349) **Links**

PCT FULLTEXT

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00163069

POINT OF SALE SYSTEM

SYSTEME DE POINT DE VENTE

Patent Applicant/Patent Assignee:

- **NCR CORPORATION**;
 ; ;

	Country	Number	Kind	Date
Patent	WO	8909452	A1	19891005
Application	WO	89US992		19890313
Priorities	JP	5169961		19880325
	US	89271		19890227

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

Publication Language:English
Filing Language:
Fulltext word count: 4367

Claims:

...system according to claim lF
characterized in that said fle means (12, 18) includerespective**first** and second **data files** (16, 22) andrespective **first** and second file control sections (14r20) coupled to said terminals (24,0), one of...

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? t /3,k/all
```

17/3,K/1 (Item 1 from file:275) **Links**

Gale Group Computer DB(TM)
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01200186 **Supplier Number:** 05041364

Study: distributed DBMS's to grow. (data base management systems) (report by Forrester Research Inc.)

Computerworld , v21 , n27 , p23(2)
July 6 , 1987
ISSN: 0010-4841
Language: ENGLISH **Record Type:** ABSTRACT

Abstract: ...corporate mergers and acquisitions, corporate downsizing of computer operations, and the introduction of IBM PS-2 micros that will facilitate distributed**data bases**. Forrester Research also predicts that the**first** four providers of**distributed data base** systems (Oracle Corp, RelationalTechnology, Sybase, and Tandem Computers) will be unable to meet their...

17/3,K/2 (Item 1 from file:813) **Links**
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1117655 a7102
World's First 24-Hour Online Internet Protection Service Allows Parents to Lock Out Offensive Web Sites

Date: June 26, 1997 15:11 EDT **Word Count:** 702

...a PC's hard drive and consume a great deal of memory space, Net Shepherd 2.0 is the **first distributed data base** screening solution that operates on a thin desktop principle.

To operate, users simply download for...

17/3K/3 (Item 1 from file:348) **Links**
EUROPEAN PATENTS
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00517470

A knowledge base management system for an information reasoning apparatus
Wissensbasis-Managementsystem fur eine Informations-Schlussfolgerungsvorrichtung
Systeme de gestion d'une base de connaissances pour un dispositif de raisonnement informatique

Patent Assignee:

- **MITSUI CHEMICALS, INC.**; (213644)
 2-5, Kasumigaseki 3-chome, Chiyoda-ku; Tokyo; (JP)
 (applicant designated states: DE;FR;GB;IT;NL)

Inventor:

- **Shibao, Kouichi, c/o Mitsui Petrochem. Ind. Ltd.**
 3 Chigusa Kaigran; Ichihara-shi, Chiba-ken; (JP)
- **Osada, Yukinori, c/o Mitsui Petrochem. Ind. Ltd.**
 3 Chigusa Kaigran; Ichihara-shi, Chiba-ken; (JP)
- **Shimizu, Makoto, c/o Mitsui Petrochem. Ind. Ltd.**
 3 Chigusa Kaigran; Ichihara-shi, Chiba-ken; (JP)
- **Nishimura, Tadashi, c/o Mitsui Petrochem. Ind. Ltd**
 3 Chigusa Kaigran; Ichihara-shi, Chiba-ken; (JP)

Legal Representative:

- **Lehn, Werner, Dipl.-Ing. et al (7471)**
 Hoffmann Eitle, Patent- und Rechtsanwalte, Postfach 81 04 20; 81904 Munchen; (DE)

	Country	Number	Kind	Date	
Patent	EP	510452	A2	19921028	(Basic)
	EP	510452	A3	19930825	
	EP	510452	B1	19980819	
Application	EP	92106152		19920409	
Priorities	JP	9195858		19910425	
	JP	9197750		19910426	

Designated States:
DE; FR; GB; IT; NL;

International Patent Class (V7): G06F-009/44; G06F-017/30; G06F-017/60; **Abstract Word Count:** 141

Type	Pub. Date	Kind	Text

Publication:English
Procedural: English

Application:English

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9834	844
CLAIMS B	(German)	9834	718
CLAIMS B	(French)	9834	1010
SPEC B	(English)	9834	4736
Total Word Count (Document A) 0			
Total Word Count (Document B) 7308			
Total Word Count (All Documents) 7308			

Specification: ...retrieval processing, thereby achieving a very high processing efficiency

Specifically, in the case of a**distributed data base** in which a plurality of**knowledge base** section 107 are distributed, when **primary** data in a **first knowledge base** is changed, the operation of a**second knowledge base** unrelated to the first data base is not stopped by conversion processing. It is therefore...

17/3K/4 (Item 1 from file:349) **Links**
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01101309

A FRAMEWORK FOR MAINTENANCE AND DISSEMINATION OF DISTRIBUTED ST ATE INFORMATION

CADRE POUR LA CONSERVATION ET LA DIFFUSION DE L'INFORMATION SUR L'ETAT PARTAGEE

Patent Applicant/Patent Assignee:

- **OPENTV INC**; 275 Sacramento Street, San Francisco, CA 94111
 US; US(Residence); US(Nationality)

Legal Representative:

- **RANKIN Rory D(agent)**
 Meyertons, Hood, Kivlin, Kowert & Goetzel,P.C., P.O. Box 398, Austin, TX 78767-0398; US;

	Country	Number	Kind	Date
Patent	WO	200423346	A2-A3	20040318
Application	WO	2003US27672		20030902
Priorities	US	2002407839		20020903

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;
FI; FR; GB; GR; HU; IE; IT; LU; MC; NL;
PT; RO; SE; SI; SK; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;
ML; MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;
UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Publication Language: English
Filing Language: English
Fulltext word count: 11162

Claims:

...The method of claim1, further comprising:

requesting an operation comprising a query from the**first** peer to the distributed data base; andZ@ Z7returning a result of the query to the first peer from the distributed**data base**.1@

3 The method of claim 1,further comprising:

requesting an operation comprising a forward message request from a **first** peer to the **distributed** r>**data base**; andforwarding the message to a**second** peer via the distributed **data base**.

4 The method of claim 1,further comprising:

requesting a change to the data state...

17/3K/5 (Item 2 from file:349) **Links**
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00464195

METHOD TO BE USED WITH A DISTRIBUTED DAT A BASE, AND A SYSTEM ADAPT ED TO WORK ACCORDING TO THE METHOD

PROCEDE A UTILISER AVEC UNE BASE DE DONNEES REPARTIES, ET SYSTEME CONCU POUR FONCTIONNER SELON CE PROCEDE

Patent Applicant/Patent Assignee:

- **TELEFONAKTIEBOLAGET LM ERICSSON**;
 ; ;

	Country	Number	Kind	Date
Patent	WO	9854660	A2	19981203
Application	WO	98SE1011		19980528
Priorities	SE	972015		19970528

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

Publication Language:English
Filing Language:
Fulltext word count: 6111

Detailed Description:

...called "log". The log information of tranactions and schema changes is also stored in **aprimary** and **secondary** fashion.

A **distributed data base** comprises several nodes which together constitute a mutual system with a mutual data base.The ...

? t /3,k/all

18/3K/1 (Item 1 from file: 349) **Links**
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00464194

METHOD FOR TRANSACTION WITHIN A DISTRIBUTED DATABASE
PROCEDE DE REALISATION DE TRANSACTIONS DANS UNE BASE DE DONNEES REPARTIES

Patent Applicant/Patent Assignee:

- **TELEFONAKTIEBOLAGET LM ERICSSON**;
 ; ;

	Country	Number	Kind	Date
Patent	WO	9854659	A2	19981203
Application	WO	98SE1010		19980528
Priorities	SE	972014		19970528

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

Publication Language: English
Filing Language:
Fulltext word count: 11629

Detailed Description:

...is also known to utilize safety copying, or back-up copying, of information in a **distributed data base**. Thus, a **primary copy** of part of a table is stored within a first node and a second copy...

t /3,k/all

23/3K/1 (Item 1 from file: 348) **Links**

EUROPEAN PATENTS

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01230454

Mobile telephone system, computer program, wireless hand-holdable telephone unit and method for making or keeping a mobile telephone unit active

Mobiltelefonsystem, Computerprogramm, drahtlose handhaltbare Telefoneinheit und Verfahren zuAktivierung und zur Aktivhaltung eines Mobiltelefons

Systeme de telephone mobile,produit de programme informatique, telephone sans fil portatif et methode pour rendre ou maintenir un telephone mobile actif

Patent Assignee:

- **Telemac Corporation**; (3066181)
 6701 Center Drive West Suite 700; Los Angeles, CA 90045; (US)
 (Proprietor designated states: all)

Inventor:

- **McGregor, Donald Scott**
 12931 So. Fairway Ridge Lane; Spokane, WA 99224;(US)
- **McGregor, Gregory M.**
 129 Estates Drive; Danville, CA 94526; (US)

Legal Representative:

- **Heusch, Christian (77134)**
 c/o OK pat AG, Chamerstrasse 50; 6300 Zug; (CH)

	Country	Number	Kind	Date	
Patent	EP	1067752	A1	20010110	(Basic)
	EP	1067752	B1	20040728	
	EP	1067752	B1	20040728	
Application	EP	2000113450		19960118	
Priorities	US	381704		19950130	

Designated States:
AT; BE; CH; DE; DK; ES; FR; GB; GR; IE;
IT; LI; LU; MC; NL; PT; SE;

Extended Designated States:
LT; LV; SI;

Related Parent Numbers: Patent (Application):EP 808547 (EP 96905183)

International Patent Class (V7): H04M-015/00**Abstract Word Count:** 122
NOTE: 1
NOTE: Figure number on first page: 1

Type	Pub. Date	Kind	Text

Publication:English
Procedural: English
Application:English

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200102	4597
SPEC A	(English)	200102	11888
CLAIMS B	(English)	200431	2779
CLAIMS B	(German)	200431	2343
CLAIMS B	(French)	200431	2928
SPEC B	(English)	200431	11390
Total Word Count (Document A) 16490			
Total Word Count (Document B) 19440			
Total Word Count (All Documents) 35930			

Specification: ...send when issued the RD(underscore)PHONE(underscore)CALLS command.

Host and PP Interaction:

HOST **sends** CB to PP

PP sends DB(2) + LRC to HOST

The two data bytes are... ..equipment and network.

HOST and Interaction:

HOST sends CB + DB(X) + LRC to PP

PP **sends** ACK to HOST

Data Sent To PP:

The NAM data is somewhat standardized, however, each phone manufacturer usually has... ...some date.

HOST and PP Interaction:

HOST sends CB + DB(3) + LRC to PP

PP **sends** an ACK to HOST

Data Sent To PP:

The data date format is slightly different in that it contains no... ...date is in the phone.

23/3K/2 (Item 2 from file:348) **Links**
EUROPEAN PATENTS
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00984258
ADAPTIVE DISTRIBUTED INFORMAT ION NETWORK
ADAPTIVES VERTEILTES INFORMATIONSNETZWERK
RESEAU ADAPTATIF D'INFORMATIQUE DISTRIBUEE

Patent Assignee:

- **BRITISH TELECOMMUNICATIONS public limited company**; (846100)
 81 Newgate Street; London EC1A 7AJ; (GB)
 (Proprietor designated states: all)

Inventor:

- **OSBORN, Beatrice, Mary**
 71 Hazelbank Road; London SE6 1LS; (GB)
- **OATES, Martin, John**
 11 Naughton Gardens; Stowmarket Suffolk IP14 2RA; (GB)
- **EDWARDS, Derek, John**
 96 Bucklesham Road; Kirton Ipswich Suffolk IP10 0PE; (GB)
- **PENGELLY, Alan, David**
 25 Aldercroft Close; Ipswich Suffolk IP1 6PN; (GB)

Legal Representative:

- **Williamson, Simeon et al (87202)**
 BT Group Legal Services, Intellectual Property Department, 8th Floor, 120 Holborn; London, EC1N 2TE; (GB)

	Country	Number	Kind	Date	
Patent	EP	958540	A1	19991124	(Basic)
	EP	958540	B1	20030625	
	WO	98035302		19980813	
Application	EP	98903150		19980206	
	WO	98GB371		19980206	
Priorities	GB	9702458		19970206	

Designated States:
DE; FR; GB;

International Patent Class (V7): G06F-017/30; G06F-011/34
NOTE: No A-document published by EPO

Type	Pub. Date	Kind	Text

Publication:English

Procedural: English
Application:English

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200326	2107
CLAIMS B	(German)	200326	1834
CLAIMS B	(French)	200326	2299
SPEC B	(English)	200326	6943
Total Word Count (Document A) 0			
Total Word Count (Document B) 13183			
Total Word Count (All Documents) 13183			

Specification: ...form of data base e.g. a relational data base,is translated as it is **transferred** to a **second data base** in the **different format** e.g. an object oriented **data** base. Similarly if an application requests data in one format from a data base in...

23/3K/4 (Item 1 from file:349) **Links**
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01545721

INFORMATION REPRODUCING SYSTEM USING INFORMATION STORAGE MEDIUM
SYSTEME DE REPRODUCTION D'INFORMATIONS UTILISANT UN SUPPORT DE STOCKAGE D'INFORMATIONS

Patent Applicant/Patent Assignee:

- **KABUSHIKI KAISHA TOSHIBA**; 1-1, Shibaura 1-chome, Minato-ku, Tokyo, 1058001 JP; JP (Residence); JP (Nationality)
 (For all designated states except: US)
- **ANDO Hideo**;
 ; JP (Residence); JP (Nationality)
- **TSUMAGARI Yasufumi**;
 ; JP (Residence); JP (Nationality)
- **TOYAMA Haruhiko**;
 ; JP (Residence); JP (Nationality)

Patent Applicant/Inventor:

- **ANDO Hideo**
 ; ; JP (Residence); JP (Nationality);
- **TSUMAGARI Yasufumi**
 ; ; JP (Residence); JP (Nationality);
- **TOYAMA Haruhiko**
 ; ; JP (Residence); JP (Nationality);

Legal Representative:

- **SUZUYE Takehiko et al(agent)**
 c/o SUZUYE & SUZUYE, 1-12-9, Toranomon, Minato-ku Tokyo, 1050001; JP;

	Country	Number	Kind	Date
Patent	WO	200788664	A1	20070809
Application	WO	2006JP322916		20061110
Priorities	JP	200623755		20060131

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)
AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG;
BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU;

CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI;
GB; GD; GE; GH; GM; GT; HN; HR; HU; ID;
IL; IN; IS; KE; KG; KM; KN; KP; KR; KZ;
LA; LC; LK; LR; LS; LT; LU; LV; LY; MA;
MD; MG; MK; MN; MW; MX; MY; MZ; NA; NG;
NI; NO; NZ; OM; PG; PH; PL; PT; RO; RS;
RU; SC; SD; SE; SG; SK; SL; SM; SV; SY;
TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ;
VC; VN; ZA; ZM; ZW;

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;
FI; FR; GB; GR; HU; IE; IS; IT; LT; LU;
LV; MC; NL; PL; PT; RO; SE; SI; SK; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;
ML; MR; NE; SN; TD; TG;

[AP] BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL;
SZ; TZ; UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Publication Language: English
Filing Language: English
Fulltext word count: 290851

Detailed Description:

...the markup file.

MRKUP. This structure can greatly facilitate edit and change processing of the **content** producer. A s for the telop text message 39 shown in FIG. 16, the playlist PLLST designates the filename and file **saving** location of the' markup file MRKUPS of the advanced subtitle via the manifest file MNFSTS...be greatly changed. That is,in this embodiment, a plurality of markup files MRKUP are **set** in correspondence with different windows during the markup presentation period, and are switched in correspondence...to the user. The advanced application ADAPL temporarily stored in the file cache FLCCH is **transferred** to the advanced application presentation engine AAPEN, and undergoes presentation processing to the user. The **information** of the advanced subtitle ADSBT stored in the file cahe FLCCH is transferred to the...

23/3K/6 (Item 3 from file:349) **Links**
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00465481

SYSTEM AND METHOD FOR TRANSFERRING DATA BETWEEN DATA SETS
SYSTEME ET PROCEDE DE TRANSFERT DE DONNEES ENTRE FICHIERS

Patent Applicant/Patent Assignee:

- **MADISON INFORMATION TECHNOLOGIES INC**;
 ; ;

	Country	Number	Kind	Date
Patent	WO	9855946	A1	19981210
Application	WO	98US11311		19980605
Priorities	US	97870841		19970606

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

Publication Language:English
Filing Language:
Fulltext word count: 6358

Detailed Description:

...may have a first data format while the data set 24 may have a second **different** data format. The data exchange system converts from the first data format of the database to the **second** different **data format** of the **data set** for **data** being **transferred** to the **second data set** .

The data exchange system may be a software application being executed by a computer system...

23/3K/7 (Item 4 from file:349) **Links**
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00444838
ADAPTIVE DISTRIBUTED INFORMAT ION NETWORK
RESEAU ADAPTATIF D'INFORMATIQUE DISTRIBUEE

Patent Applicant/Patent Assignee:

- **BRITISH TELECOMMUNICATIONS PUBLIC LIMITED COMPANY**;
 ; ;
- **OSBORN Beatrice Mary**;
 ; ;
- **OATES Martin John**;
 ; ;
- **EDWARDS Derek John**;
 ; ;
- **PENGELLY Alan David**;
 ; ;

	Country	Number	Kind	Date
Patent	WO	9835302	A1	19980813
Application	WO	98GB371		19980206
Priorities	GB	972458		19970206

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

Publication Language:English
Filing Language:
Fulltext word count: 11314

Detailed Description:

...form of data base
e.g. a relational data base, is translated as it is
transferred to a **second data base** in the **different format**
e.g. an object oriented**data** base. Similarly ifan
application requests data in one format from adata base
in...

```
? t /3,k/all
```

24/3K/1 (Item 1 from file: 348) **Links**
EUROPEAN PATENTS
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00306058
Digital data processing system.
Digitales Datenverarbeitungssystem.
Systeme de traitement de donnees numeriques.

Patent Assignee:

- **DATA GENERAL CORPORATION**; (410940)
 Route 9; Westboro Massachusetts 01581; (US)
 (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)

Inventor:

- **Bachman, Brett L.**
 214 W. Canton Street Suite 4; Boston Massachusetts 02116;(US)
- **Bernstein, David H.**
 41 Bay Colony Drive; Ashland Massachusetts 01721; (US)
- **Bratt, Richard Glenn**
 9 Brook Trail Road; Wayland Massachusetts 01778; (US)
- **Clancy, Gerald F.**
 13069 Jaccaranda Center; Saratoga California 95070; (US)
- **Gavrin, Edward S.**
 Beaver Pond Road RFD 4; Lincoln Massachusetts 01773; (US)
- **Gruner, Ronald Hans**
 112 Dublin Wood Drive; Cary North Carolina27514; (US)
- **Jones, Thomas M. Jones**
 300 Reade Road; Chapel Hill North Carolina 27514; (US)
- **Katz, Lawrence H.**
 10943 S. Forest Ridge Road; Oregon City Oregon 97045; (US)
- **Mundie, Craig James**
 136 Castlewood Drive; Cary North Carolina; (US)
- **Pilat, John F.**
 1308 Ravenhurst Drive; Raleigh North Carolina 27609; (US)
- **Richmond, Michael S.**
 Fearringtn Post Box 51; Pittsboro North Carolina 27312; (US)
- **Schleimer Stephen I.**
 1208 Ellen Place; ChapelHill North Carolina 27514; (US)
- **Wallach, Steven J.**
 12436 Green Meadow Lane; Saratoga California 95070; (US)

- **Wallach, Walter, A., Jr.**
 1336 Medfield Road; Raleigh North Carolina 27607; (US)

Legal Representative:

- **Robson, Aidan John et al (69471)**
 Reddie & Grose 16 Theobalds Road; London WC1X 8PL; (GB)

	Country	Number	Kind	Date	
Patent	EP	290111	A2	19881109	(Basic)
	EP	290111	A3	19890503	
	EP	290111	B1	19931222	
Application	EP	88200917		19820521	
Priorities	US	266404		19810522	

Designated States:
AT; BE; CH; DE; FR; GB; IT; LI; LU; NL;
SE;

Related Parent Numbers: Patent (Application):EP 67556 (EP 823025960)

International Patent Class (V7): G06F-009/30; ; **Abstract Word Count:** 123

Type	Pub. Date	Kind	Text

Publication:English
Procedural: English
Application:English

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1044
CLAIMS B	(German)	EPBBF1	890
CLAIMS B	(French)	EPBBF1	1185
SPEC B	(English)	EPBBF1	154314
Total Word Count (Document A) 0			
Total Word Count (Document B) 157433			
Total Word Count (All Documents) 157433			

Specification: ...first interrupt an arithmetic SOP to request EU 122 to aid in evaluation of a **Name Table** Entry. Before that **first** interrupt is completed, EU 120 may interrupt **again**, and so on.

SOP Stack 514, is a single frame stack for storing current state...

24/3K/2 (Item 1 from file:349) **Links**
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01545721
INFORMATION REPRODUCING SYSTEM USING INFORMATION STORAGE MEDIUM
SYSTEME DE REPRODUCTION D'INFORMATIONS UTILISANT UN SUPPORT DE STOCKAGE D'INFORMATIONS

Patent Applicant/Patent Assignee:

- **KABUSHIKI KAISHA TOSHIBA**; 1-1, Shibaura 1-chome, Minato-ku, Tokyo, 1058001 JP; JP (Residence); JP (Nationality)
 (For all designated states except: US)
- **ANDO Hideo**;
 ; JP (Residence); JP (Nationality)
- **TSUMAGARI Yasufumi**;
 ; JP (Residence); JP (Nationality)
- **TOYAMA Haruhiko**;
 ; JP (Residence); JP (Nationality)

Patent Applicant/Inventor:

- **ANDO Hideo**
 ; ; JP (Residence); JP (Nationality);
- **TSUMAGARI Yasufumi**
 ; ; JP (Residence); JP (Nationality);
- **TOYAMA Haruhiko**
 ; ; JP (Residence); JP (Nationality);

Legal Representative:

- **SUZUYE Takehiko et al(agent)**
 c/o SUZUYE & SUZUYE, 1-12-9, Toranomon, Minato-ku Tokyo, 1050001; JP;

	Country	Number	Kind	Date
Patent	WO	200788664	A1	20070809
Application	WO	2006JP322916		20061110
Priorities	JP	200623755		20060131

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)
AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG;
BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU;

CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI;
GB; GD; GE; GH; GM; GT; HN; HR; HU; ID;
IL; IN; IS; KE; KG; KM; KN; KP; KR; KZ;
LA; LC; LK; LR; LS; LT; LU; LV; LY; MA;
MD; MG; MK; MN; MW; MX; MY; MZ; NA; NG;
NI; NO; NZ; OM; PG; PH; PL; PT; RO; RS;
RU; SC; SD; SE; SG; SK; SL; SM; SV; SY;
TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ;
VC; VN; ZA; ZM; ZW;

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;
FI; FR; GB; GR; HU; IE; IS; IT; LT; LU;
LV; MC; NL; PL; PT; RO; SE; SI; SK; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;
ML; MR; NE; SN; TD; TG;

[AP] BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL;
SZ; TZ; UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Publication Language: English
Filing Language: English
Fulltext word count: 290851

Detailed Description:

...advanced application ADAPL or advanced subtitle ADSBT is once stored in the file cache FLCCH (**data** cache DTCCH) , speeding up of the presentation processing and control processing can be guaranteed.

The **primary** video player PRMVP and **secondary** video player SDCVP as the playback processors shown in FIG. 10 will be described later... ...a simplified and modified structure of Advanced VTS. It consists of Time Map (TMAP) with **attribute information** and Secondary Enhanced Video Object (S-EVOB) . Secondary Video Set shall be played back by...

? t /3,k/all

25/3K/1 (Item 1 from file: 349) **Links**

PCT FULLTEXT

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01545721

INFORMATION REPRODUCING SYSTEM USING INFORMATION STORAGE MEDIUM

SYSTEME DE REPRODUCTION D'INFORMATIONS UTILISANT UN SUPPORT DE STOCKAGE D'INFORMATIONS

Patent Applicant/Patent Assignee:

- **KABUSHIKI KAISHA TOSHIBA** ; 1-1, Shibaura 1-chome, Minato-ku, Tokyo, 1058001 JP; JP (Residence); JP (Nationality)
 (For all designated states except: US)
- **ANDO Hideo**;
 ; JP (Residence); JP (Nationality)
- **TSUMAGARI Yasufumi**;
 ; JP (Residence); JP (Nationality)
- **TOYAMA Haruhiko**;
 ; JP (Residence); JP (Nationality)

Patent Applicant/Inventor:

- **ANDO Hideo**
 ; ; JP (Residence); JP (Nationality);
- **TSUMAGARI Yasufumi**
 ; ; JP (Residence); JP (Nationality);
- **TOYAMA Haruhiko**
 ; ; JP (Residence); JP (Nationality);

Legal Representative:

- **SUZUYE Takehiko et al(agent)**
 c/o SUZUYE & SUZUYE, 1-12-9, Toranomon, Minato-ku Tokyo, 1050001; JP;

	Country	Number	Kind	Date
Patent	WO	200788664	A1	20070809
Application	WO	2006JP322916		20061110
Priorities	JP	200623755		20060131

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG;
BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU;
CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI;
GB; GD; GE; GH; GM; GT; HN; HR; HU; ID;
IL; IN; IS; KE; KG; KM; KN; KP; KR; KZ;
LA; LC; LK; LR; LS; LT; LU; LV; LY; MA;
MD; MG; MK; MN; MW; MX; MY; MZ; NA; NG;
NI; NO; NZ; OM; PG; PH; PL; PT; RO; RS;
RU; SC; SD; SE; SG; SK; SL; SM; SV; SY;
TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ;
VC; VN; ZA; ZM; ZW;

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;
FI; FR; GB; GR; HU; IE; IS; IT; LT; LU;
LV; MC; NL; PL; PT; RO; SE; SI; SK; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;
ML; MR; NE; SN; TD; TG;

[AP] BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL;
SZ; TZ; UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Publication Language: English
Filing Language: English
Fulltext word count: 290851

Detailed Description:

...multi-angles or multi-scenes selected by user.

9] Allow user to append specific information **related** with video **information** and to transmit result via network: 9.1) Allow user to add comment about video...a simplified and modified structure of Advanced VTS. It consists of Time Map (TMAP) with **attribute information** and Secondary Enhanced Video Object (S-EVOB) . Secondary Video Set shall be played back by...the markup file-.

MRKUP. This structure can greatly facilitate edit and change processing of the **content** producer. A s for the telop text message 39 shown in FIG. 16, the playlist PLLST designates the filename and file **saving** location of the' markup file MRKUPS of the advanced subtitle via the manifest file MNFSTS...be greatly changed. That is,in this embodiment, a plurality of markup files MRKUP are **set** in correspondence with different windows during the markup presentation period, and are switched in correspondence...

```
? show files
```

[File 344] **Chinese Patents Abs** Jan 1985-2006/Jan
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[File 347] **JAPIO** Dec 1976-2007/Mar(Updated 070809)
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[File 350] **Derwent WPIX** 1963-2007/UD=200755
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**File 350: DWPI has been enhanced to extend content and functionality of the database. For more info, visit http://www.diabg.com/dwpi/.*

[File 371] **French Patents** 1961-2002/BOPI 200209
(c) 2002 INPI. All rts. reserv. All rights reserved.
**File 371: This file is not currently updating. The last update is 200209.*

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; d s
Set     Items   Description
S1       1785   S DISTRIBUTED(3N)(DATABASE OR DATA()BASE)
S2      19318   S ((DATABASE OR DATA()BASE OR REGIST? OR DATABANK? ? OR DATATABLE? ? OR
DATASET? ? OR DATAFILE? ? OR DATA OR INFORMATION OR KNOWLEDGE)()(BASE? ? OR BANK? ? OR
SET? ? OR FILE? ? OR TABLE? ?) OR DB OR (ORGANI?ED()COLLECTION? ? OR RELATED OR
INTERRELATED)(2W)(FILES OR INFORMATION OR DATA) OR DBMS OR INVENTORY OR
INVENTORIES)(5N)(FIRST OR 1ST OR PRIMARY OR INITIAL)
S3      24562   S ((DATABASE OR DATA()BASE OR REGIST? OR DATABANK? ? OR DATATABLE? ? OR
DATASET? ? OR DATAFILE? ? OR DATA OR INFORMATION OR KNOWLEDGE)()(BASE? ? OR BANK? ? OR
SET? ? OR FILE? ? OR TABLE? ?) OR DB OR (ORGANI?ED()COLLECTION? ? OR RELATED OR
INTERRELATED)(2W)(FILES OR INFORMATION OR DATA) OR DBMS OR INVENTORY OR
INVENTORIES)(5N)(SECOND OR 2ND OR 2 OR SECONDARY)
S4     131099   S (FIRST OR 1ST OR PRIMARY OR INITIAL)(5N)(UPDAT??? OR COP??? OR IMPORT??
OR IMPORTING OR SEND??? OR TRANSFER? ? OR TRANSFERR??? OR SAVE? ? OR SAVING OR SNAPSHOT?
OR SNAP()SHOT? OR MIRROR?)
S5     312723   S (SECOND OR 2ND OR 2 OR SECONDARY)(7N) (UPDAT??? OR COP??? OR IMPORT?? OR
IMPORTING OR SEND??? OR TRANSFER? ? OR TRANSFERR??? OR SAVE? ? OR SAVING OR SNAPSHOT? OR
SNAP()SHOT? OR MIRROR?)
S6     381052   S (UPDAT??? OR COP??? OR IMPORT?? OR IMPORTING OR SEND??? OR TRANSFER? ?
OR TRANSFERR??? OR SAVE? ? OR SAVING OR SNAPSHOT? OR SNAP()SHOT? OR MIRROR?) (5N)(CONTENT?
? OR DATA OR INFO OR INFORMATION)
S7     133974   S (ATTRIBUTE? OR CHARACTERISTIC? OR FORMAT)(7N)(CONTENT? ? OR DATA OR INFO
OR INFORMATION)
S8      35207   S (MISMATCH??? OR MIS()MATCH??? OR UNMATCH??? OR UN()MATCT??? OR
CONTRADICTORY OR CONTRARY OR DIFFERENT OR MISMATCHED OR UNEQUAL OR UNSIMILAR OR DIFFERENT
OR DISSIMILAR)(7N)(ATTRIBUTE? OR CHARACTERISTIC? OR FORMAT)
S9     117982   S REGIST?(3N)(DATA OR INFORMATION OR INFO OR CONTENT? ?)
S10    168898   S (SEARCH? OR DISPLAY? OR EDIT? OR PRINT?)(3N)(PROCESS OR PROCEDURE? ? OR
OPERATION OR ACTION OR SERVICE? ?)
S11      7228   S AU=(SUGIYAMA, M? OR SUGIYAMA M? OR SUGIYAMA(2N)M?)
S12      3422   S (S1:S3) AND S4
S13      2465   S S12 AND S5
S14      2124   S S13 AND S6
S15       231   S S14 AND S7
S16        23   S S15 AND S8
```

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S17          16    S S15 AND S9
S18          14    S S17 NOT S16
S19          12    S S15 AND S10
S20           9    S S19 NOT (S18 OR S16)
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my applicant

? t /3,k/all

3/3,K/1 (Item 1 from file:350) **Links**
Derwent WPIX
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0009382726 *Drawing available*
WPI Acc no: 1999-317907/199927
XRPX Acc No: N1999-238129
Information processor for distributed database system - reproduces information on attribute item when attribute item cannot be set as duplicate database by judgment of decision unit in predetermined attribute item of database
Patent Assignee: CANON KK (CANO); SUGIYAMA M (SUGI-I)
Inventor: **SUGIYAMA M**

Patent Family (3 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 11110275	A	19990423	JP 1997267277	A	19970930	199927	B
US 20020083084	A1	20020627	US 1998161401	A	19980928	200245	E
JP 3919303	B2	20070523	JP 1997267277	A	19970930	200735	E

Priority Applications (no., kind,date): JP 1997267277 A 19970930

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
JP 11110275	A	JA	12	10		
JP 3919303	B2	JA	16		Previously issued patent	JP 11110275

Information processor for distributed database system... Inventor: **SUGIYAMA M Alerting Abstract** ...USE - For **distributed database** system... Original Publication Data by AuthorityInventor name & address: **SUGIYAMA MITSUMASA**... ...**SUGIYAMA, MITSUMASA**

? t /3,k/all

16/3,K/1 (Item 1 from file:350) **Links**

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0015822798 *Drawing available*
WPI Acc no: 2006-378666/200639
XRPX Acc No: N2006-318668

Data processing system, has busses with respective characteristics, where resistors are provided for rapid coupling of busses to logical halves, respectively, and are coupled to respective busses

Patent Assignee: UNISYS CORP (BURS)
Inventor: BYERS L L; OVERLEY M R; THORSBAKKEN L E

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 7054978	B1	20060530	US 2001931710	A	20010816	200639	B

Priority Applications (no., kind, date): US 2001931710 A 20010816

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 7054978	B1	EN	12	7	

Data processing system, has busses with respective characteristics, where resistors are provided for rapid coupling of busses to logical halves, respectively, and are... Original Publication Data by Authority **Original Abstracts:** A method of and apparatus for improving the efficiency of a data processing system employing **multiple** busses operating at multiple data **transfer** rates. Each **of the** multiple physical busses has its own characteristics including maximum **data transfer** rate, parallel **word width**, etc. Two or more of these physical busses are combined into a single logical bus.. ... bus has characteristics resulting from the combination of physical busses. These characteristics can include greater **parallel** word widths, enhanced maximum **data transfer** rates, etc. ...**Claims:** system having a first component and a second component, the improvement comprising: a. A **first data** bus having a first set of **characteristics** responsively **coupled** between said first component via a **first** interface and said second component via a second interface; b. A second **data** bus having a second set of **characteristics** responsively coupled between **said** first component via a third interface **and** said second component via a fourth interface; and c. A circuit responsively coupled to said... ... and said second data bus having a single set of interrupt handling logic which handles **interrupts** from both said **first data bus** and said **second** data bus and a selector which can couple said first data bus to said third... ... and said second interface and which can couple said second data bus to said first **interface** and said **second** interface for alternately **selecting transfers** from said **first data** bus and said **second data** bus which combines **said first data bus and** said **second** data **bus** into a logical bus having **a third set** of **characteristics wherein said** third set of **characteristics** is different from either said first **set** of **characteristics** and said second **set** of **characteristics.>**

16/3,K/2 (Item 2 from file:350) **Links**
Derwent WPIX
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0015793418 *Drawing available*
WPI Acc no: 2006-349788/200636
XRPX Acc No: N2006-296691
Selection method of format specific parameter in disk drive, involves generating format specific data structure from compressed data structure based on timing data
Patent Assignee: WESTERN DIGITAL TECHNOLOGIES INC (WDIG-N)
Inventor: CHHEDA N H

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 7046467	B1	20060516	US 2003427760	A	20030430	200636	B

Priority Applications (no., kind, date): US 2003427760 A 20030430

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 7046467	B1	EN	12	5	

Selection method of format specific parameter in disk drive, involves generating format specific data structure from compressed data structure based on timing data Original Titles:Method for generating a**format** specific **data** structure in a disk drive having differing surface formats **Alerting Abstract** ...The method involves selecting compressed data structure (400) with compressed timing map(402) and timing **data** corresponding to selected disk surface. The **format** specific **data** structure (408) is generated from the compressed data structure based on timing **data**. The **data transfer** operations are performed by the control system based on generated **format** specific **data** structure. DESCRIPTION - The **format** specific **data** structure (408) comprises a hard sector description table (HSDT) containing the expanded timing map (409.....408 **format** specific **data** structure... Original Publication Data by Authority...**Original Abstracts:**drive comprising a control system and a plurality of disk surfaces each having a surface **format** for storing **data**, **wherein** at least **one** surface **format** is **different** than **other** surface **formats**. The method includes initializing the disk drive for operation, receiving a **data** transfer command, and selecting a disk surface for performing data transfer operations based on the..... data structure corresponding to the selected disk surface, generating a second format specific data structure **from** the **first format** specific **data structure**, **and** performing **the data transfer** operations by **the control** system based on the calculated variable. ...**Claims:**drive comprising a control system and a plurality of disk surfaces each having a surface **format** for storing data, wherein at least **one** surface **format is different** than other surface formats, **the** method **comprising**:initializing the disk drive for operation;receiving a **data transfer** command;selecting a disk surface for performing **data** transfer operations based on the received data transfer command;selecting a first format specific data structure comprising timing data related to data transfer operations and corresponding to the selected **disk** surface;generating a **second format** specific **data** structure from the first **format** specific **data** structure based on the timing **data**; and **performing** the **data** transfer operations by the **control** system **based** on the second **format** specific **data** structure.

16/3,K/3 (Item 3 from file:350) **Links**
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0015287654 *Drawing available*
WPI Acc no: 2005-637791/200565
XRPX Acc No: N2005-523052
Dynamically configured voice mail system for disseminating and managing real-time business data, receives message import file containing parameters for specifying intended recipient and discrete messages/action options to be presented
Patent Assignee: CHATFIELD W N (CHAT-I)
Inventor: CHATFIELD W N

Patent Family (3 patents, 106 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20050195947	A1	20050908	US 2004791183	A	20040302	200565	B
US 6944274	B1	20050913	US 2004791183	A	20040302	200565	E
WO 2005096610	A1	20051013	WO 2004US21633	A	20040707	200567	E

Priority Applications (no., kind,date): US 2004791183 A 20040302

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
US 20050195947	A1	EN	10	6		
WO 2005096610	A1	EN				
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW					
Regional Designated States,Original	AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					

Dynamically configured voice mail system for disseminating and managing real-time business data, receives message import file containing parameters for specifying intended recipient and discrete messages/action options to be presented ...NOVELTY - A **data** management unit receives a message **import** file containing three different parameters for specifying the intended recipient and discrete messages/action options. ...voice synthesis unit actuates a transceiver to output the discrete messages and action options in **different** speech **format**, on receiving access from respective recipient. Original Publication Data by Authority **Original Abstracts:** A dynamically configured voice mail system which allows customers to **send** digital **information** through **a** number **of** different sources into a user's voice mail system. The dynamically configured voice mail system... ... A dynamically configured voice mail

system which allows customers to **send** digital **information** through a number of different sources **into** a **user**'s voice mail system. The dynamically configured voice mail system prioritizes the customer's information... ...A dynamically configured voice mail system (140), which allows customers (100) to **send** digital **information** through a number of different sources into a user's voice **mail** system. **The** dynamically configured voice mail system (140) prioritizes the customer's information and converts this information... **Claims:** A system for disseminating and managing business information comprising: data management means for receiving and **disseminating** transmitting entity-generated message **import** files, each said message **import file** including **first** parameters pursuant **to** which said **data** management means allocates a first portion of **data** from each **respective** said message **import file** according to intended recipient **aggregations** defined by said transmitting entity, **second** parameters pursuant to which a second portion of data representative of discrete messages or information..... intended recipient, generating audible speech in a format which is audibly perceptible by said intended **recipients** via an audible **information** transceiver device and which conveys, in speech form, said discrete messages or information units to... ... 2. A method for disseminating and managing business information comprising the steps of: receiving int **data management** means a message **import** file from a **transmitting** entity, said **import** file having parameters indicative of **the** intended recipient or recipients **of information** reflected in said message **import file**, of **data** representative of messages or information units to be presented **to** respective said intended recipient **or** recipients, of **a** transmitter-defined hierarchical order in which said messages or information are to be presented to..... intended recipients in association respectively with each of said messages or information units; with said **data** management means, processing said message **import** file by parsing and writing **data** within **said** message **import** file to an **intended** recipient-accessible storage area configured **for** interactive access via an audible **information** transceiver interface means, **for** voice-synthesis-based dissemination to said intended recipients of audible-perceptible representations of said messages...

16/3,K/4 (Item 4 from file:350) **Links**
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0014333516 *Drawing available*
WPI Acc no: 2004-521454/200450
XRPX Acc No: N2004-413198
Image processor e.g. digital color copier specifies attribute information that corresponds to input image data, based on which input image data is processed
Patent Assignee: OUCHI S (OUCH-I); RICOH KK (RICO); SHIBAKI H (SHIB-I); TAKENAKA H (TAKE-I)
Inventor: OUCHI S; SHIBAKI H; TAKENAKA H

Patent Family (2 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 2004193964	A	20040708	JP 2002359424	A	20021211	200450	B
US 20040179237	A1	20040916	US 2003732442	A	20031211	200461	E

Priority Applications (no., kind,date): JP 2002359424 A 20021211

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
JP 2004193964	A	JA	18	10	

Image processor e.g. digital color copier specifies attribute information that corresponds to input image data, based on which input image data is processed ...NOVELTY - A generator generates **attribute information** which shows **characteristic** of an image from image **data** and a memory stores the generated information. An input unit inputs image **data** and a specification unit specifies the stored **attribute information** that corresponds to input image **data**. A processor processes the input image **data** using specified **attribute information**. Original Publication Data by Authority **Original Abstracts:** An image processing apparatus creates **attribute** information that indicates characteristics of an image from an image data, stores the attribute information... ...exists in the attribute information stored. If the attribute information created from the new image **data** is in the **attribute information** stored, the **image processing** apparatus specifies the **attribute information**, and processes **the image data** based on the **attribute information** specified. ...**Claims:** for image processing, comprising: a first attribute creating unit that creates, from a first image **data**, a first attribute information that indicates image characteristics; a storing unit that stores the first... ... first image data based on the first attribute information; a transferring unit that transfers the **first** image data **to** outside; an **input** unit **that** inputs a second **image data** from **the** outside; **and** a **determining** unit that determines whether the first **attribute** of the second image **data is** stored in the storing unit, and specifies the first **attribute** information as an active **attribute information** upon determining that **the** first **attribute information** of the second image **data** is stored **in the** storing unit, wherein **the processing** unit carries out a processing **of the** second image **data** based **on** the active **attribute information.**

16/3,K/5 (Item 5 from file:350) **Links**
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0014317576 *Drawing available*
WPI Acc no: 2004-504968/200448
XRPX Acc No: N2004-398733
Remote control method for cable box, involves switching remotely controlled device to use alternative decoding data set when improper decoding and execution of received alpha encoded data signal is observed
Patent Assignee: WEBER H J (WEBE-I)
Inventor: WEBER H J

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 6747590	B1	20040608	US 2001779992	A	20010212	200448	B

Priority Applications (no., kind, date): US 2001779992 A 20010212

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 6747590	B1	EN	21	13	

Original Publication Data by Authority...**Original Abstracts:**Discusses a provision for user accessible preselection between more than one alternative encoding and decoding**data format** when a **command sent** to one device appears to cause undesirable random interference with another device's functions. A..... interference caused by mutual remote controller coupling, the user mayselect and preset a distinctly**different** code **format** for **at** least **one** of the remotely controlled devices. ..**Claims:**in the same environment, comprising the steps of:immutably storing in a remote controller a**first** alpha encoding data set, asecond alpha encoding data set, and a first beta encoding data set, wherein the signals corresponding to the**first alpha encoding data set** are different from the**signals** corresponding to **the second** alpha encoding**data set**, and wherein the remote**controller** is selected **to send** only the signals from one of the encoding**data** sets;immutably storing in a first remotely controlled apparatus a first alpha decoding data set... ... remotely controlled apparatus a second alpha deoding data set and a first beta decoding data**set**, wherein the second remotely **controlled apparatus** is selected to use one**of the** decoding **data sets**;wherein the decoding**data sets** are used to decode the signals from their respective encoding data sets;utilizing a keypad to enter a command to cause the remote controller to**send a first** alpha encoded **data** signal to the first and the**second** remotely controlled apparatus;using **the** first **and** the **second remotely** controlled apparatus to receive the encoded data signal;using the first and the second remotely..... apparatus to decode and to execute the command corresponding with the signal if the decoding **data set** is **compatible** with the **first** encoding **data set**;observing that the**second** remotely controlled apparatus improperly decodes and executes**the first** alpha encoded data signal;**and**switching **the second** remotely controlled apparatus to an**alternative** decoding **data set.**>

16/3,K/6 (Item 6 from file:350) **Links**
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0014073752 *Drawing available*
WPI Acc no: 2004-256873/200424
XRPX Acc No: N2004-204257
Data management method in virtual tape system, involves assigning attributes to each logical storage volume of virtual tape based on data sets in each logical volume
Patent Assignee: DAWSON E M (DAWS-I); INT BUSINESS MACHINES CORP (IBMC); PEAKE J W (PEAK-I)
Inventor: DAWSON E M; PEAKE J W

Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20040044843	A1	20040304	US 2002230513	A	20020829	200424	B
US 6961811	B2	20051101	US 2002230513	A	20020829	200571	E

Priority Applications (no., kind, date): US 2002230513 A 20020829

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 20040044843	A1	EN	16	6	

Original Titles:Apparatus and method to maintain**information** by assigning one or more storage**attributes** to each of a plurality of bgical volumes... ...Apparatus and method to maintain**information** by assigning one or morestorage **attributes** to each of a plurality of logical volumes ...NOVELTY - A**n initial data set** is partially **copied** into a **primary** logical volumeof tape. Attributes are assigned to the logical volume and remaining**data sets** are **copied** into the **secondary** logical volume.**Attributes related** to **data sets** in **secondary** volume are assigned. Original Publication Data by Authority**Original Abstracts:**A method to maintain**information** by assigning one **or** more storage **attributes** to each of **a** plurality of logical volumes. The method writes a first portion of a dataset to a.... A method to maintain**information** by assigning one or more storage**attributes** to **each** of a plurality of logical volumes. **The** method writes a first portion of a dataset to a first logical volume. The method...**Claims:**We claim:**1**. A method to maintain **information** by assigning one or more storage**attributes** to **each** of a plurality of logicalvolumes, **comprising** the steps of:forming a first dataset;writing a first portion of said first dataset.... 1. A method to maintain **information** by assigning one or more storage**attributes** to each of a plurality of logical volumes, **o**mprising the steps of:forming a first dataset;assigning**one** or more storage **attributes** to said **first** logical volume;selecting one or more storage construct names for said first dataset;issuing a..... an empty clone volser field;writing a **fi**st portion of said first dataset to a**first logical** volume;**saving** each of **said** one or more storage construct names as a**different** one of said one or more storage**attributes**;assigning a first identifier to said first logical volume;determining i**f a**n LEOV (logical End of**Volume**) is approaching;operative if the LEOV of said first logical volume**is** approaching, issuing a second mount command, wherein**said** second mount command includes a clone volser **fi**ld comprising said first identifier, and wherein said...

16/3,K/7 (Item 7 from file:350) **Links**
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0013705539 *Drawing available*
WPI Acc no: 2003-802681/200375
XRPX Acc No: N2003-643345
Audio system has ensemble controller that transmits clock signal having frequency that synchronizes transmission rates of audio and musical instrument digital interface music data codes, from respective data sources
Patent Assignee: YAMAHA CORP (NIHG)
Inventor: FURUKAWA R

Patent Family (7 patents, 34 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20030177890	A1	20030925	US 2003385932	A	20030311	200375	B
EP 1349167	A1	20031001	EP 20036265	A	20030321	200375	E
JP 2003280662	A	20031002	JP 200283859	A	20020325	200375	E
CN 1450526	A	20031022	CN 2003128603	A	20030325	200406	E
US 6949705	B2	20050927	US 2003385932	A	20030311	200563	E
CN 1252674	C	20060419	CN 2003128603	A	20030325	200661	E
JP 3835324	B2	20061018	JP 200283859	A	20020325	200668	E

Priority Applications (no., kind,date): JP 200283859 A 20020325; US 2003385932 A 20030311

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
US 20030177890	A1	EN	17	6		
EP 1349167	A1	EN				
Regional Designated States,Original	AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR					
JP 2003280662	A	JA	8			
JP 3835324	B2	JA	10		Previously issued patent	JP 2003280662

Original Publication Data by Authority...**Claims:**of music, comprising:a first data source (120/ 140) having a first memory space for**storing** a set of **first** music **data** codes **representative** of said piece of music, and responsive to a control signal (CL1) representative of **a**data transmission rate for **transferring** said first music **data** codes **from** said **first** memory space;a **second** data source (130/ 140) having a second memory space for storing a set of second music data codes representative of aid another**piece** of music and different in format from said set of first**music data** codes, and responsive **to** a **control** signal for **transferring** said **second** music **data** codes **from** said **second** memory **space**; anda data-**to**-sound converter (100) for producing a first sort of sound and a second sort of... ... a fst data transmission rate for said set of first musicdata codes with a **second** data transmission rate for**said set** of **second** music **data**

16/3,K/8 (Item 8 from file:350) **Links**
Derwent WPIX
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0013154998 *Drawing available*
WPI Acc no: 2003-237673/200323
XRPX Acc No: N2003-189288
E-mail processing method for business applications, involves dividing data stream of e-mail formatted for single printing process, when total number of pages for data stream exceeds preset value
Patent Assignee: QWEST COMMUNICATIONS INT INC (QWES-N)
Inventor: COLE S E; HAUFSCHILD K A; POLLARD L C

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 6496810	B1	20021217	US 1999447701	A	19991123	200323	B

Priority Applications (no., kind, date): US 1999447701 A 19991123

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 6496810	B1	EN	11	2	

Original Publication Data by Authority...**Original Abstracts:**stream for each first page is sent to a printer for printing in one-up **format**. The data stream **for** each **set** of **second** pages is reformatted **to** allow the data stream for each **set** of **second** pages to be **sent** to and printed on a different printer from the **first** printer in a two-up **format**. After each of the first pages and each set of second pages are printed, the.....**Claims:**said second pages data stream formatted for one-up printing to two-up printing(c3) **sending** said **first page data stream** for one-up printing to a **first** printer; and(c4) **sending** said second **pages data stream** reformatted **for** two-up printing to a **second** printer.

16/3,K/9 (Item 9 from file:350) **Links**
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0011240289 *Drawing available*
WPI Acc no: 2002-179933/200223
XRPX Acc No: N2002-136759
Data communication method for use with distributed computer networks with systems using different record formats, includes a server comprised of conversion routines to convert records from one format to another
Patent Assignee: PENDLETON W W (PEND-I)
Inventor: PENDLETON W W; WILMOT W L

Patent Family (4 patents, 94 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2002008947	A1	20020131	WO 2001US23364	A	20010725	200223	B
AU 200177159	A	20020205	AU 200177159	A	20010725	200236	E
US 20040139076	A1	20040715	WO 2001US23364	A	20010725	200447	E
			US 2003333897	A	20030124		
US 7120636	B2	20061010	WO 2001US23364	A	20010725	200667	E
			US 2003333897	A	20030124		

Priority Applications (no., kind,date): US 2000220610 P 20000725; US 2003333897 A 20030124

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
WO 2002008947	A1	EN	22	8		
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
Regional Designated States,Original	AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
AU 200177159	A	EN			Based on OPI patent	WO 2002008947
US 20040139076	A1	EN			PCT Application	WO 2001US23364
US 7120636	B2	EN			PCT Application	WO 2001US23364
					Based on OPI patent	WO 2002008947

Original Publication Data by Authority...**Original Abstracts:**computer (**4**), a second computer (**14**), and a server (**22**) in a distributed computer network (**2**) where the server (**22**) is configured to **send**, receive, and **process data** packets including records having different formats to and from **the first** computer (**4**) **and** the **second** computer (**14**). The

server (22) converts a first record in afirst format (26 a... ... the second format (26 b) into the first format (26 a). The second computer is **configured** to receive **data** packets having the first record in **the second format (26 b), and** to **send data** packets having the **second** record in **the** second format (26 b... computer (4), a second computer (14), and a server (22) in a distributed computer network (2) where the server (22) is configured to **send**, receive, and process **data** packets including records having different formats to and from the first computer (4) an the... ... the first record in the second format (26b) and converts a second record in the **second** format (26b) into the first **format** (26a). **The second** computer is **configured** to receive data packets **having** the first record in the **second format** (26b), and to **send data packets** having the **second** record in the second format (26b... ... A method of communicating **data** between databases having different formats includes providing a first computer (4), a second computer (14), and a server (22) in a distributed computer **network** (2) where the server (22) is configured to **send**, **receive**, and process **data** packets including records having **different** formats to and from the first computer (4) and the second computer (14). The server... ... format (26b) into the first format (26a). The second computer is configured to receive data **packets** having the first **record** in the **second format (26b)**, and to **send data** packets having the **second** record in the second format (26b). formats, selon lequel il est prevu demettre en place un premier ordinateur (4), un **second ordinateur (14)** et un serveur (22) **dans** un reseau informatique **distribue** (2). Le serveur (22) est configure pour envoyer, recevoir et traiterdes paquets de donnees comprenant... **Claims:** the steps of: (a) providing a first database on a first computer connected to a **distributed** computer **network**, **the first** computer **configured** to **send** a **data** packet having a **first record** in a **first format**, and **the first** computer configured **to** receive a **data** packet **having** a second record in the first **format**; (b) **providing** a second database on a second computer connected to the distributed computer network, the second computer configured to receive a data packet having the first record in **second** format, and the **second** computer configured to **send a data** packet having **the second** record in **a second** format; and (c) providing **a** server in the **distributed** computer network, the **server** configured to **send**, receive, and process **data** packets including records between the **first** computer and the **second computer**, wherein the server **converts** the **first** record in the first **format** into the first record in the second format and/or converts the second record in..... of: providing a first computer, a second computer, and a server in a distributed computer **network**, the server configured to **send** and receive **data** packets including records having different formats between the first computer and the second computer, the server configured to convert a record **format of** a record **received** from the **first** computer **into** a record **format** of a record of the second computer, and vice versa, wherein the server includes: a packet sniffer configured to separate from a first **data** packet **a** first record in a first **format** and a first transmitter-receiver layer, the packet sniffer also configured to separate from a second **data** packet a **second** record in a second **format** and a **second** transmitter-receiver layer; a transmitter-receiver conversion matrix configured to scan the first transmitter-receiver layer **and** the second transmitter-receiver layer; and a **convert** function configured to use at least one conversion routine for converting the first record in...

16/3,K/10 (Item 10 from file:350) **Links**
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0011215325
WPI Acc no: 2002-154367/200220
XRPX Acc No: N2002-117448
Docking system allowing communication between a bus in a portable computer and a bus in a docking station has respective interfaces for the buses which connect to each other in an intermediate format not used by either of the two buses
Patent Assignee: MOBILITY ELECTRONICS INC(MOBI-N); TAO LOGIC SYSTEMS LLC (TAOL-N)
Inventor: AHERN F

Patent Family (12 patents, 81 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2001061512	A1	20010823	WO 2000US3752	A	20000214	200220	B
AU 200029940	A	20010827	AU 200029940	A	20000214	200220	E
			WO 2000US3752	A	20000214		
EP 1188120	A1	20020320	EP 2000908634	A	20000214	200227	E
			WO 2000US3752	A	20000214		
KR 2002005001	A	20020116	WO 2000US3752	A	20000214	200249	E
			KR 2001713161	A	20011015		
AU 751695	B	20020822	AU 200029940	A	20000214	200266	E
			WO 2000US3752	A	20000214		
CA 2347896	C	20030429	CA 2347896	A	20000214	200337	E
			WO 2000US3752	A	20000214		
JP 2003523575	W	20030805	WO 2000US3752	A	20000214	200353	E
			JP 2001560830	A	20000214		
EP 1594066	A2	20051109	EP 2000908634	A	20000214	200574	NCE
			EP 200515568	A	20000214		
EP 1188120	B1	20060607	EP 2000908634	A	20000214	200641	E
			WO 2000US3752	A	20000214		
			EP 200515568	A	20050718		
DE 60028570	E	20060720	DE 60028570	A	20000214	200652	E
			EP 2000908634	A	20000214		
			WO 2000US3752	A	20000214		
JP 2006323869	A	20061130	JP 2001560830	A	20000214	200680	NCE
			JP 2006203273	A	20060726		
DE 60028570	T2	20070531	DE 60028570	A	20000214	200736	E
			EP 2000908634	A	20000214		
			WO 2000US3752	A	20000214		

					PCT Application	WO 2000US3752
					Based on OPI patent	EP 1188120
					Based on OPI patent	WO 2001061512

...NOVELTY - A portable computer **sends information** over its bus to access devices on a second bus in a docking station. Information... Original Publication Data by Authority...**Original Abstracts:**interface is coupled between the second bus and the link. The first interface and the **second** interface are operable to (a) send bus-related **information** through the link in a **format different** from that of the first bus and the second bus, and (b) allow the portable... ... interface is coupled between the second bus and the link. The first interface and the **second** interface are operable to (a) send bus-related **information** through the link in a **format different** from that of the first bus and the second bus, and (b) allow the portable..... interface is coupled between the second bus and the link. The first interface and the **second** interface are operable to (a) send bus-related **information** through the link in a **format different** from that of the first bus and the second bus, and (b) allow the portable... .. deux interfaces servent a a) envoyer des informations en serie via la liaison sous un **format different** de celui des premier et second bus et b) permettre a l'ordinateur portable, par... ...**Claims:**Schnittstelle und die zweite Schnittstelle in der Weise betreibbar sind, dass sie (a) seriell busbezogene **Information** uber die Verbindung in einem **Format** senden, welches verschieden ist von jenem des ersten Busses und des zweiten Busses, wobei wahrend... ... said second interface operating as a bridge, **characterised in that** said first interface and said **second** interface are operable to (a) serialy send bus-related **information** through said link in a **format different** from that of said first bus and said second bus, wherein during a transaction on the first bus, the **first** interface is operable to **transfer**, from the bus, an address via the link and is arranged then to proceed, without... ..a) envoyer en series des informations orientees bus sur ladite liaison de donnees dans un **format different** de celui dudit premier bus et dudit deuxieme bus, dans lequel, au cours d'une... ... interface and said second interface operating as a bridge and being operable to (a) serially **send** bus-related **information** through said link in a **format different** from that of said first bus and said second bus without waiting for an incoming acknowledgement over said link before inaugurating a **transfer** of said **information** over said link, and (b) allow said portable computer, ommunicating through said first bus, to... ... bus before the pending transaction on said first bus, wherein during a transaction the bus-**related** information provided to the **first** interface is **transferred** to the **second** interface without waiting for an incoming acknowledgement from the **second** interface before inaugurating a **transfer** of said **information** over said link.

16/3,K/11 (Item 11 from file:350) **Links**
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0010881180 *Drawing available*
WPI Acc no: 2001-501143/200155
XRPX Acc No: N2004-333916
Data packets transferring method for data processing system e.g. Internet, involves transferring packet bytes via data packet transfer circuit receiver and packing buffers that define transfer paths separate from direct data path
Patent Assignee: TELEFONAKTIEBOLAGET ERICSSON L M (TELF)
Inventor: HELLUM P L; KLEVEN B K

Patent Family (2 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
NO 199903483	A	20010116	NO 19993483	A	19990715	200155	B
US 6742063	B1	20040525	US 2000614249	A	20000712	200440	ETAB

Priority Applications (no., kind, date): NO 19993483 A 19990715

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
NO 199903483	A	NO	0	2	
US 6742063	B1	EN	9	2	

Data packets transferring method for data processing system e.g. Internet, involves transferring packet bytes via data packet transfer circuit receiver and packing buffers that define transfer paths separate from direct data path Original Titles:Method and apparatus for efficient**transfer** of **data** packets **Alerting Abstract** ...NOVELTY - The method involves**transferring data** packet size **information** prior to **transfer** of packet bytes via a direct data path to set a**data** packet **transfer** circuit (DTC) byte counter. The bytes from a data device are fed to a DTC... ...a DTC packing buffer and then to a data processing unit. The buffers define buffered **data** packet **transfer** paths separate from the direct**data** path. ...DTC byte counter reaches the terminal count. An INDEPENDENT CLAIM is also included for a**data** packet **transfer** device for **transferring data** packets between a **data** processing unit and a data device.....USE - Used for **transferring data** packets between a **data** processing unit and a data device in a data processing system e.g. Internet, digital... ...ADVANTAGE - The receiver and packing buffers define buffered **data** packet **transfer** paths separate from the direct **data** path, thereby effectively reducing capacitive loading on the CPU bus and also increases the speed of the CPU bus, thus efficiently **transferring** the **data** packets. The reduction in the capacitive loading reduces power consumption... Original Publication Data by Authority **Original Abstracts:**In a data processing system, the **effective** speed of transferring **data** packets between **a data** processing unit and **various** other devices with **different** performance **characteristics** is **improved** by **a data transfer** method and **a packing** and buffering device, thus offloading the data processing unit or the various devices. FIFO buffers provide intermediate storage of **transfer data**, and packing **and unpacking** modules ensure efficient use of bus widths that are different on the data processing side and **the** device side. **Data** packet **transfer** control **is** effected **using** a control and status

module with a common byte counter, and adirect transfer is facilitated via**a** supplementary direct **data** path between the data processing unit and other devices.**Claims:**What is claimed is:1. A method for use in a**data** processing system for **transferring** a **data packet** between a **data processing** unit (**DPU**) having a**first data** bus of a first bus width operating at a first speed and a data device.. ... plurality of data bytes and a header including information about packet size, the system including (**1**) data packet **transfer** circuitry (DTC) providing a **buffered** packet **path** between the **first** bus and the **second** bus and (2) a direct data path between the first bus and the second bus separate from the buffered packet **path**, the method comprising:a)**transferring**, via the direct**data** path, packet size**information from** the **data** device **to** the DPU prior **to transfer** of **packet data** bytes associated with the packet **size information** over **the** buffered packet path;b) setting a DTC byte counter based on the packet sizeinformation;c) receiving from the**data device**, via the **second** data bus and the buffered packet path, receive data bytes and feeding the receive data..... data bytes;e) repeating steps c) and d) until the DTC bytecounter reaches a **terminal** count;f) **transferring** the receive **data** bytes from the DTC receive buffer to a DTC packing buffer having a byte-width**corresponding** to the **first** bus width until the packing buffer is filledor the DTC byte counter reaches the terminal count; and**g**) **transferring** from the DTC packing buffer to the DPU, via the fist data bus and the buffered packet path, **data** bytes **stored** in the DTC packing buffer,wherein the DTC receive buffer and DTC packing buffer define the buffered**data packet transfer** path separate from the direct**data** path.

16/3,K/12 (Item 12 from file:350) **Links**
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0010378386 *Drawing available*
WPI Acc no: 2000-118866/200011
XRPX Acc No: N2000-090088
Data processing apparatus for transferring data between registers and memory
Patent Assignee: ADVANCED RISC MACHINES LTD (ADRI-N); ARM LTD (ARMA-N)
Inventor: CHRISTOPHER N H; DAVID J S; HINDS C N; SEAL D J

Patent Family (5 patents, 3 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
GB 2339937	A	20000209	GB 19998544	A	19990414	200011	B
JP 2000029688	A	20000128	JP 1999147258	A	19990526	200017	E
US 6170001	B1	20010102	US 199885756	A	19980527	200103	E
GB 2339937	B	20020828				200264	E
JP 3828677	B2	20061004	JP 1999147258	A	19990526	200668	E

Priority Applications (no., kind,date): US 199885756 A 19980527

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
GB 2339937	A	EN	93	15		
JP 2000029688	A	JA	40			
JP 3828677	B2	JA	61		Previously issued patent	JP 2000029688

Data processing apparatus for transferring data between registers and memory Original Titles:DATA TRANSFER BETWEEN REGISTER AND MEMORY... ...System for transfering**format data** from **format** register to memory wherein **format data** indicating the distribution of single or double precision data type in the register bank. **Alerting Abstract** ...and data words of data of a second type of data (i.e. double precision **data**). A **transfer** logic (42) responsive to a store instruction, control the storing of the data words in... DESCRIPTION - A **format** register (FPREG 200) stores **format data** indicating the distribution in a **register** bank of data words. In a **second** mode, a **transfer** logic is responsive to the store instruction specifying an even number of data words to... ... bank to the memory. Also responsive to the store instruction specifying an odd number of **data** words, causing the **format data** from the register to be stored in memory along with an even number of data... ...a method of operating a data processing **apparatus**, a **data** processing apparatus for **transferring data**, and a **method of transferring data** between registers and memory.... ... USE - For **transferring data** between registers and memory... ... ADVANTAGE - Enables a single register bank to be used to store both **data of** a **first** and **second** data types. Information about the **distribution** of **the** data in the **register bank** can be selectively stored to memory as required, without increasing the number of instructions, andOriginal Publication Data by Authority**Original Abstracts:**words of data of said first type data and data words of data of sad **second** type **data**, and **transfer** logic, responsive to a store

instruction, to control the storing of th data words in the register bank to a memory. Further, a **format** register is provided for storing **format data** indicating the distribution in the register bank of data words of data of said fir data type and data words of data of said **second** data type. In said **second** mode, the **transfer** logic is responsive to said store instruction specifying an even number of data words to... .to said memory, and is responsive to said store instruction specifying an odd number of **data** words, to cause the **format data** from the **format** register to be stored to said memory along with an even number of data words... ...second mode specifying an odd number of data words, and this will automatically cause the **contents** of the **format** register to be stored to memory in addition to the required even number of data... ..**Claims:** processing apparatus for at least storing data, said data comprised of first and second type **data**, said **first** type **data** having **a format different from said** second type **data**, said **apparatus** having a mode of operation wherein data of said second type, comprising an even multiple... ... bank having a plurality of data slots for storing data words of said first type **data** and **said second** type **data**; **transfer logic** responsive **to** a store **instruction**, to control the storing of the data words in the register bank **to** a memory; a **format** register for storing **format data** indicating the **distribution** in the register **bank of data** words of **data** of **said first** type data and said **second** type data; **in** said **mode** of operation, the **transfer logic** being responsive to said store instruction specifying an **even** number of **data** words to cause those data words to be stored from said register bank to said memory, and being responsive to said store instruction specifying an odd number of **data** words, to cause the **format data** from the **format register** to be stored to **said memory** along with **an** even number of **data** words from the register bank.

16/3,K/13 (Item 13 from file:350) **Links**
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Bad date

0010194885 *Drawing available*
WPI Acc no: 2000-505047/200045
XRPX Acc No: N2000-373415
Data storage system has controller to control initiation and direction of data transfer to respective storage devices using data and parity bit slots
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: LUCAS G S; YANES J A

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 6085285	A	20000704	US 1997969842	A	19971113	200045	B

Priority Applications (no., kind, date): US 1997969842 A 19971113

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 6085285	A	EN	13	7	

Data storage system has controller to control initiation and direction of data transfer to respective storage devices using data and parity bit slots Alerting Abstract ...link (60) connects the two storage devices with storage controller. The initiation and direction of **data transfer** for respective storage device is controlled using storage controller. DESCRIPTION - The storage controller includes data transmitter (80), receiver (90), automatic **data transfer** buffer (32) and microprocessor (34). A cyclic redundancy check (CRC) generator coupled to data latch... ...ADVANTAGE - **Data transfer** rate is doubled effectively without increasing the **transfer** speed of **data** storage devices using storage controller... ..32 Automatic **data transfer** buffer... Original Publication Data by Authority **Original Abstracts:** A data storage system is described which alows **data** storage devices with **different characteristics**, such as differing **data** rates and **transfer** speeds, to be connected, and intermixed, along a single data and communication link. The data.....second data storage device, and a data and communication link coupled therebetween. The storage controller **transfers data** to and from the **first** data storage device using data locations within the **data** and communication link to **transfer** a **data** byte, a parity location to **transfer** the associated parity bit, and a communication signal location to **transfer** a **data** clocking signal. The storage controller further **transfers data** to and from the **second** data storage device using the **data** locations to **transfer** a **data** byte and the parity location to **transfer** a **data** clocking, or a **data** strobe, signal. The storage controller also provides cyclic redundancy checking (CRC) to detect data transmission... **Claims:** A data storage system comprising: a first data storage device for storing data, said **first** data storage device having a set of device characteristics; a second data storage device for... .. data storage device having a set of device characteristics different from said set of device **characteristics** pertaining to said first **data storage** device; a storage **controller for** initiating and directing a **transfer** of said **data** to and from said **first** and said **second data** storage devices; and a data link for transmitting said data, said data link coupled between... ... storage controller transmits data to and receives data from said first data storage device using **said data** bit slots **to transfer** a **first data** byte, said parity bit **slot** to **transfer** a **parity** bit **associated with** said **first data** byte, and one **of**

said communication signal slots to **transfer a data** clocking signal, and wherein said storage controller further transmits **data** to **and** receives **data** from said **second** data storage device using said **data bit** slots to **transfer a second data byte**, **and** said parity bit slot **to transfer** a **data strobe** signal.

16/3,K/14 (Item 14 from file:350) **Links**
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bad Date

0009688619 *Drawing available*
WPI Acc no: 1999-156413/199914
Related WPI Acc No: 2003-335407; 2003-335408; 2003-335409; 2003-335410; 2003-451208
XRPX Acc No: N1999-113078
Standardized filtering of data from arbitrary data provider
Patent Assignee: MICROSOFT CORP (MICT)
Inventor: DE V D; DE VORCHIK D; GALLAGHER L B; MOMOH O; SATALICH T A; SCOTT W G; TURNER R S; TURNER R S J

Patent Family (7 patents, 5 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
GB 2329492	A	19990324	GB 199815684	A	19980717	199914	B
DE 19842688	A1	19990325	DE 19842688	A	19980917	199918	E
FR 2768826	A1	19990326	FR 199811681	A	19980918	199919	E
JP 11161685	A	19990618	JP 1998247448	A	19980901	199935	E
US 6279016	B1	20010821	US 1997938032	A	19970921	200150	E
GB 2329492	B	20030305				200318	E
DE 19842688	B4	20060511	DE 19842688	A	19980917	200633	E

Priority Applications (no., kind, date): US 1997938032 A 19970921

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
GB 2329492	A	EN	64	16	
JP 11161685	A	JA	20		

...NOVELTY - A set of **data** objects and associated **attributes** is received from the arbitrary **data** provider, and is displayed together with a number of windowed (310) label (320-326) and filters (330-336), describing **data** set **attributes** (340-346), and associations. A filter input is received from a system user, and is... Original Publication Data by Authority...**Original Abstracts:**The illustrated interface includes a header control presenting labels, filters, and pulldown menus for each **attribute** of a **data** set, presented by an associated display control. The control communicates with a data provider through... ...**Claims:**data from the arbitrary data provider, said first set of data including a plurality of **data** objects and a plurality of **attributes** associated with **the data** objects, wherein **the data** objects are constituents of the **data set, and** wherein the **attributes** describe the **data objects**; displaying the first set of data, together with a plurality **of** labels and a plurality of **filter** input areas for **receiving** from a user **of** the computer system filter input **that** is responsive to an **attribute** of the **first set** of **data**, wherein: each **of** the plurality **of** labels describes an attribute of the **first data set**; and each of the plurality of filter input areas is associated with **different attribute** of the first set of **data**; the method further including: receiving, **from** the user, filter input into one or more of

the plurality of filter input areas, wherein a first filter input area accepts filter input responsive to a first attribute associated with the first filter input area; sending the filter input to the arbitrary data provider; receiving from the arbitrary data provider a second set of data, wherein said second set of data is derived by filtering the first data set according to the first attribute with the filter input from the user for the first attribute; and displaying the second set of data with said plurality of labels and filter input areas.

16/3,K/15 (Item 15 from file:350) **Links**
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0009660043 *Drawing available*
WPI Acc no: 1999-613320/199953
XRPX Acc No: N1999-452201
Monitoring of network traffic using traffic probes configured to a common data format.
Patent Assignee: 3COM CORP (THRE-N)
Inventor: BROWN R; IDDON R; MAXWELL D; PEARCE M A; TAMS J

Patent Family (5 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
GB 2337903	A	19991201	GB 199811416	A	19980528	199953	B
GB 2337903	B	20000607	GB 199811416	A	19980528	200031	E
US 6279037	B1	20010821	US 1998131717	A	19980810	200150	E
US 6327620	B1	20011204	US 1998131725	A	19980810	200203	E
US 20030069952	A1	20030410	US 1998131717	A	19980810	200327	E
			US 2001823306	A	20010402		

Priority Applications (no., kind,date): GB 199811416 A 19980528

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
GB 2337903	A	EN	81	10		
US 20030069952	A1	EN			Continuation of application	US 1998131717
					Continuation of patent	US 6279037

Monitoring of network traffic using traffic probes configured to a common data format. ...traffic uses traffic probes (127, 137, 147) and configures the identified probes to generate (506)**data** sets as close to a common **data format** as possible. The collected traffic**data** includes application layerand network layer data whenever possible. Original Publication Data by Authority...**Original Abstracts:**attempts are made to configure the probes to generate network traffic data sets which areas close to a preselected common**data format** as possible. **Application layer** traffic**data** is collected in**addition** to network layer traffic**data**. The common **data format** uses delta **count values**, and terminal count mode**format**. Network **data** is **obtained** from **a** probe using one of the available table formats which is selected in the following order. ... made to configure the identified probes to generate network traffic data sets which are as **close** to a preselected common **data format** as possible. Application**layer traffic data** is collected in addition**to** network layer trafficdata when possible. In an **RMON2** embodiment, the common**data format** includes the use**of delta** count values as opposed to absolute count values. The common**data format** of the present **invention utilizes** terminal count mode**format** as opposed to all count mode **format** for the presentation of**RMON2** application layer**information**. To minimize the amount**of** data processing required to put a probeprimes network traffic **data** into the desired common **format** and to maximize the **amount** of **information** collected, network **data** is

obtained from a probe using one of the available RMON2 table formats. In order to avoid... ...made to configure the identified probes to generate network traffic data sets which are **close** to a preselected common **data format** as possible. Application **layer traffic data** is collected in addition **to** network layer traffic data when possible. In **a RMON2** embodiment, the common **data format** includes the use **of delta** count values as opposed to absolute count values. The common **data format** of the present **invention utilizes** terminal count mode **format** as opposed to all count mode **format** for the presentation of **RMON2** application layer **information**. To minimize the amount **of** data processing required to put a probe primes network traffic **data** into the desired common **format** and to maximize the **amount** of **information** collected, network **data** is **obtained** from a probe using one of the available RMON2 table formats. The utilized format is... ...**Claims:** to receive data collected over a period of time; and operating the processor circuitry to **update** at least one record in each of the stored **first** and second sets of **records** with the received **data**.... ... time; operating the processor circuitry to receive data collected over a period of time; and **operating** the processor circuitry to **update** at least one record in each of the stored **first** and **second sets** of records with the received data such that a previous record included in **each** of the **first** and **second data** structures is replaced; periodically collecting network traffic data, wherein the collected network traffic data includes... ... buffer, the retrieved network traffic data being received by the processor circuitry; wherein the step **of** operating the processor circuitry to **update** at least one record in each of the stored first and **second** sets of records includes **the** steps of: **updating** a record corresponding to a **first** conversation in the **first** set of records; and **updating** a record corresponding to the **first** conversation in the second set of records.... ... to collect and store network traffic data in one of a plurality of network traffic **data** table **formats**, the **data** table **format** being used with at least one individual controlled probe being the one of the plurality... ... table formats that is supported by the individual controlled probe that is closest to and **different from** a preselected common network traffic **data format** wherein **the** common preselected **data format** includes **delta** count values and terminal count mode values; and periodically retrieving, from each individual controlled probe

16/3,K/16 (Item 16 from file:350) **Links**
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0009026957 *Drawing available*
WPI Acc no: 1998-583895/199849
XRPX Acc No: N1998-454851
Memory card for use in a games console - has facility for downloading and storing programs from a video games machine
Patent Assignee: SONY COMPUTER ENTERTAINMENT INC (SONY); SONY COMPUTER ENTERTAINMENT KK (SONY); SUGIMURA A (SUGI-I)
Inventor: SUGIMURA A

Patent Family (18 patents, 27 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 1998048377	A1	19981029	WO 1998JP1917	A	19980424	199849	B
JP 11007504	A	19990112	JP 1997274732	A	19971007	199912	E
AU 199870814	A	19981113	AU 199870814	A	19980424	199913	E
EP 933724	A1	19990804	EP 1998917687	A	19980424	199935	E
			WO 1998JP1917	A	19980424		
JP 10545484	X	19990907	JP 1998545484	A	19980424	199947	E
			WO 1998JP1917	A	19980424		
CN 1226985	A	19990825	CN 1998800688	A	19980424	199952	E
TW 373148	A	19991101	TW 1998105741	A	19980415	200036	E
MX 199900021	A1	19990901	MX 199921	A	19990104	200067	E
KR 2000022166	A	20000425	WO 1998JP1917	A	19980424	200105	E
			KR 1998710584	A	19981224		
SG 82658	A1	20010821	SG 19996129	A	19980424	200158	E
US 20020032058	A1	20020314	WO 1998JP1917	A	19980424	200222	E
			US 1999202795	A	19990303		
			US 2001975818	A	20011012		
US 20020032059	A1	20020314	US 1999202795	A	19990303	200222	E
			US 2001976372	A	20011012		
US 6582311	B1	20030624	WO 1998JP1917	A	19980424	200343	E
			US 1999202795	A	19990303		
US 6743103	B2	20040601	WO 1998JP1917	A	19980424	200436	E
			US 1999202795	A	19990303		
			US 2001976372	A	20011012		
CN 1527236	A	20040908	CN 200410003205	A	19980424	200478	E
EP 933724	B1	20050907	EP 1998917687	A	19980424	200559	E
			WO 1998JP1917	A	19980424		
DE 69831475	E	20051013	DE 69831475	A	19980424	200568	E
			EP 1998917687	A	19980424		

			WO 1998JP1917	A	19980424		
DE 69831475	T2	20060629	DE 69831475	A	19980424	200643	E
			EP 1998917687	A	19980424		
			WO 1998JP1917	A	19980424		

Priority Applications (no., kind,date): WO 1998JP1917 A 19980424; JP 1997274732 A 19971007; JP 1997107943 A 19970424

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
WO 1998048377	A1	JA	66			
National Designated States,Original	AU CA CN JP KR MX SG US					
Regional Designated States,Original	AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
JP 11007504	A	JA	13	13		
AU 199870814	A	EN			Based on OPI patent	WO 1998048377
EP 933724	A1	EN			PCT Application	WO 1998JP1917
					Based on OPI patent	WO 1998048377
Regional Designated States,Original	DE ES FR GB IT NL					
JP 10545484	X	JA			PCT Application	WO 1998JP1917
					Based on OPI patent	WO 1998048377
TW 373148	A	ZH				
KR 2000022166	A	KO		19	PCT Application	WO 1998JP1917
					Based on OPI patent	WO 1998048377
SG 82658	A1	EN				
US 20020032058	A1	EN			Division of application	WO 1998JP1917
					Division of application	US 1999202795
US 20020032059	A1	EN			Division of application	US 1999202795
US 6582311	B1	EN			PCT Application	WO 1998JP1917
					Based on OPI patent	WO 1998048377
US 6743103	B2	EN			Division of application	WO 1998JP1917
					Division of application	US 1999202795
					Division of patent	US 6582311
EP 933724	B1	EN			PCT Application	WO 1998JP1917
					Based on OPI patent	WO 1998048377
Regional Designated States,Original	DE ES FR GB IT NL					
DE 69831475	E	DE			Application	EP 1998917687
					PCT Application	WO 1998JP1917

					Based on OPI patent	EP 933724
					Based on OPI patent	WO 1998048377
DE 69831475	T2	DE			Application	EP 1998917687
					PCT Application	WO 1998JP1917
					Based on OPI patent	EP 933724
					Based on OPI patent	WO 1998048377

Original Publication Data by Authority...**Original Abstracts:**for operating the stored programs; and display means (44) for displaying information in acordance with **the** programs. The programs **transferred** from the machine body are written in the program memory (41a) through the control means... ... and a non-volatile memoryfor data storage. Data such as a program or game **result**, etc. **transferred** from the video game apparatus body to the memory card device may be written once... ... non-volatile memory for datastorage. Data such as a program or game result, etc. **transferred** from the **video** game **apparatus** body to the memory card devicemay be written once into the nonvolatile memory through... ... an application program to provide a video game and downloads a first application programnd **attribute data** for executing the first application program to the auxiliary memory unit. The auxiliary memory unit executes the **first application** program downloaded from **the base** unit to provide **a** video game independently of the base unit. The auxiliarymemory can also change **attribute data**, and the changed **attribute data** can then be received therefrom by the base unit and used to execute a second application program **for providing** a video game **at the** base unit... programs; and display means (44) for displaying informaton in accordance with the programs. The programs **transferred** from the **machine** body are written in the program memory (41a) through the control means (41). By operating... ...**Claims:**to a base unit (2) of a video game apparatus (1), the device comprising: **a first** memory (46) for storing **data transferred** from the base unit (2) of the video game apparatus (1) as resultant data obtained through execution of a first... .. unit;a second memory (41a) for storing a second program;a control unit (41) for **controlling** execution of the **second program**;**a** display unit (44) for **displaying information** in accordance with the second program;an operation input unit (43) for operating the second... ... unit (41) executes the second program down-loaded into the second memory (41a); and wherein
attribute data utilized at the contrd unit (41) under the secondprogram is down-loaded into the... ... interface from the base unit along withthe second program, and the control unit has **function** to vary the **attribute data** in accordance with input from the operation input unit (43).... ..Dispositif (40) **de carte** memoire ayant une interface connectable a une unite (2) de base d'un appareil (1... card device having an interface connectable to a video game apparatus, the device comprising: **a first** memory for storing **data transferred** from the video game apparatus as resultant data obtained through execution of a first program... ..second memory and the first program executed at the video game apparatus are programs different **from** each other, and **wherein the** control unit executes the **second** program down-**loaded** into the second memory, and wherein **attribute data** utilized at the control unit under the second program is down-loaded into the second... ... interface from the video game apparatus along with the second program, and the control unit **has** a function to vary the **attribute data** in accordance with input from the operation input unit... ... a first application program; and a central processing unit operable to execute a second application **program to** provide a second video game; and an auxiliary memory unit operable to communicate with said... ... memory operable to store the first application program, a control unit operable to execute the **first application** program independently of the base unit, and an operation input unit operable to receive input... ... unit is operable to download to said auxiliary memory unit the first application program and **data** representing **attributes** for providing a first video game upon execution of the first application program, and to receive from said auxiliary memory unit **data** representing changes in **attributes** for providing the second video game, and wherein said central processing unit is operable to

16/3,K/17 (Item 17 from file:350) **Links**
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0009003831 *Drawing available*
WPI Acc no: 1998-559651/199848
Related WPI Acc No: 1998-559652; 1998-559653; 1998-559656; 2005-513801
XRPX Acc No: N1998-436424
Graphics processor e.g. for creation of graphical images to be printed or displayed - executes computer instruction set in form of opcode with operand which is, or indicates location data to be processed with data to be processed consist of variable length stream of data
Patent Assignee: AMIES C (AMIE-I); CANON INFORMATION SYSTEMS RES AUSTRALIA (CANO); CANON KK (CANO); GIBSON I (GIBS-I); LONG T M (LONG-I)
Inventor: AMIES C; CHUNG W Y; ELBOURNE T R; GIBSON I; GIBSON I R; GRAHAM S; HIGGINBOTTOM R P; KEVIN C H W; LONG T M; MICHAEL J W; PAUL R H; PROKOP T T; PULVER M; STONEY G; TIMOTHY M L; WEBB M J; WIN Y C; WONG K C; YIP D

Patent Family (40 patents, 28 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 875853	A2	19981104	EP 1998303352	A	19980429	199848	B
AU 199863697	A	19981112	AU 199863697	A	19980429	199906	E
AU 199863698	A	19981112	AU 199863698	A	19980429	199906	E
AU 199863695	A	19981119	AU 199863695	A	19980429	199907	E
AU 199863696	A	19981119	AU 199863696	A	19980429	199907	E
JP 11085963	A	19990330	JP 1998169415	A	19980430	199923	E
JP 11085969	A	19990330	JP 1998169416	A	19980430	199923	E
JP 11122116	A	19990430	JP 1998169417	A	19980430	199928	E
JP 11167627	A	19990622	JP 1998169414	A	19980430	199935	E
AU 717168	B	20000316	AU 199863695	A	19980429	200024	E
AU 717336	B	20000323	AU 199863697	A	19980429	200025	E
AU 200014980	A	20000413	AU 199863697	A	19980429	200028	NCE
			AU 200014980	A	20000209		
US 6061749	A	20000509	US 199825744	A	19980218	200030	E
AU 200016349	A	20000511	AU 199863695	A	19980429	200031	NCE
			AU 200016349	A	20000211		
US 6118724	A	20000912	US 199825726	A	19980218	200046	E
AU 727990	B	20010104	AU 199863698	A	19980429	200107	E
AU 728882	B	20010118	AU 199863696	A	19980429	200109	E
US 6195674	B1	20010227	US 199825506	A	19980218	200114	E
US 6237079	B1	20010522	US 199825758	A	19980218	200130	E
US 6246396	B1	20010612	US 199825771	A	19980218	200135	E
US 6259456	B1	20010710	US 199825614	A	19980218	200141	E
AU 200133402	A	20010621	AU 199863698	A	19980429	200147	NCE

? t /3,k/all

18/3,K/1 (Item 1 from file:350) **Links**

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0013671546 *Drawing available*

WPI Acc no: 2003-767988/200372

Related WPI Acc No: 2005-394636

XRPX Acc No: N2003-615170

Healthcare resources providing computer system, has patient tool that manages patient resources and includes many links to connect users to patient support groups, clinical trial information, and health guide

Patent Assignee: HALE & DORR LLP(HALE-N); MERCK & CO INC (MERI)

Inventor: BAUER K; DIPPOLD S; KITTRELL M; MOORE L; SCHRAMM-APPLE S

Patent Family (16 patents, 101 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2003081387	A2	20031002	WO 2003US8221	A	20030318	200372	B
US 20030217159	A1	20031120	US 2002364743	P	20020318	200377	E
			US 2003390168	A	20030318		
US 20030217291	A1	20031120	US 2002364743	P	20020318	200377	E
			US 2003390159	A	20030318		
US 20030222900	A1	20031204	US 2002364743	P	20020318	200380	E
			US 2003390162	A	20030318		
CA 2387236	A1	20030919	CA 2387236	A	20020319	200382	NCE
CA 2422461	A1	20030918	CA 2422461	A	20030318	200382	E
CA 2422467	A1	20030918	CA 2422467	A	20030318	200382	E
CA 2422495	A1	20030918	CA 2422495	A	20030318	200382	E
CA 2422528	A1	20030918	CA 2422528	A	20030318	200382	E
CA 2422540	A1	20030918	CA 2422540	A	20030318	200382	E
US 20040078211	A1	20040422	US 2002364743	P	20020318	200428	E
			US 2003390166	A	20030318		
US 20040078224	A1	20040422	US 2002364743	P	20020318	200428	E
			US 2003390165	A	20030318		
US 20040078225	A1	20040422	US 2002364743	P	20020318	200428	E
			US 2003390539	A	20030318		
AU 2003225843	A1	20031008	AU 2003225843	A	20030318	200432	E
EP 1490820	A2	20041229	EP 2003745124	A	20030318	200502	E
			WO 2003US8221	A	20030318		
JP 2005521150	W	20050714	JP 2003579052	A	20030318	200547	E
			WO 2003US8221	A	20030318		

Priority Applications (no., kind,date): US 2003390539 A 20030318; US 2003390168 A 20030318; US 2003390166 A 20030318; US 2003390165 A 20030318; US 2003390162 A 20030318; US 2003390159 A 20030318; CA

2387236 A 20020319; US 2002364743 P 20020318

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
WO 2003081387	A2	EN	110	61		
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU S C SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW					
Regional Designated States,Original	AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					
US 20030217159	A1	EN			Related to Provisional	US 2002364743
US 20030217291	A1	EN			Related to Provisional	US 2002364743
US 20030222900	A1	EN			Related to Provisional	US 2002364743
CA 2387236	A1	EN				
CA 2422461	A1	EN				
CA 2422467	A1	EN				
CA 2422495	A1	EN				
CA 2422528	A1	EN				
CA 2422540	A1	EN				
US 20040078211	A1	EN			Related to Provisional	US 2002364743
US 20040078224	A1	EN			Related to Provisional	US 2002364743
US 20040078225	A1	EN			Related to Provisional	US 2002364743
AU 2003225843	A1	EN			Based on OPI patent	WO 2003081387
EP 1490820	A2	EN			PCT Application	WO 2003US8221
					Based on OPI patent	WO 2003081387
Regional Designated States,Original	AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR					
JP 2005521150	W	JA	64		PCT Application	WO 2003US8221
					Based on OPI patent	WO 2003081387

...**Original Titles:**Method and system for real-timesecure **transfer** of personal **information** between websites... **Alerting Abstract** ...timely and appropriate information to help them practice better medine. The system provides the right **information** in an appropriate **format** and also provides appropriate filtering of **information**. The system also provides a fairlyeasy way of distributing information targeted to certain physicians... Oginal Publication Data by Authority...**Original Abstracts:**present invention, healthcare resources maybe accessed via the Internet. Optionally, the system includes user **registration data** for each **user**, **and** certain resources maybe restricted to appropriate users. The system advantageously provides, utilizing the sets..... A method of securely **transferring** user **information** between a website server and at least one external website server **to** authenticate **a** user with the at least one external

website server includes receiving a request for accessing... ... websiteserver to the at least one external website server is generated and the user**information** is **transferred** from the website server to the at least one external website **server** by **a** HTTP GET protocol and/or a HTTP POST protocol... ... present invention, healthcare resources may be accessed via the Internet. Optionally, the systemincludes user **registration data** for each user, and certain resources may be restricted to appropriate users. The system advantageously provides, utilizing the sets of tools, **aunified and** organized access to a widevariety of a large number of resources that would otherwise... present invention, healthcare resources may be accessed via the Internet. Optionally, the system includes user**registration data** for each user, and certain resources maybe restricted to appropriate users. The system advantageously... ..unified and organized access to a wide variety of alarge number of resources that**would otherwise** be too confusing and/or unwieldy to access, especiallyin its entirety... ..**Claims:**What is claimed is:**1**. A method of securely**transferring** user **information** between a website server and at least one external website server to authenticate a user with the at least one external website server, the method comprising at least one **of** the **sequential**, non-sequential, or sequence independentsteps of:receiving a request for accessing the at least... ... secure connection from the website server to the at least one external website server; and**transferring** the user **information** from the website server to the at least one external website server by at least... ... HTTP POST protocol.... ... displaying, responsive to a first user selection of said at least one category, a list**of first information** representing each of the plurality of slidekits assigned to the first user selection;(D) displaying..... least one of the plurality of slides;third information representing the third user selection;(F)**saving**, responsive to a fourth user selection, a reference location tothe at least one of... ... the selected slidekit, to a folder assigned to the user, on the another computer;(G)**saving**, responsive to a**second** user request on the local computer, at least one bookmark into the user's folder..... one of the bookmarks contained therein.

18/3,K/2 (Item 2 from file:350) **Links**
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0012980252 *Drawing available*
WPI Acc no: 2003-057732/200305
Related WPI Acc No: 2000-375429; 2001-548958; 2002-010268
XRPX Acc No: N2003-044759
Floating point register file used in microprocessor, converts floating point numbers into integers and stores them in floating point registers
Patent Assignee: IP FIRST LLC (IPFI-N)
Inventor: ELLIOTT T A; HENRY G G

Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20020133691	A1	20020919	US 1997980481	A	19971129	200305	B
			US 2001866078	A	20010525		
			US 2002120538	A	20020410		
US 6754810	B2	20040622	US 2002120538	A	20020410	200442	E

Priority Applications (no., kind,date): US 2001866078 A 20010525; US 1997980481 A 19971129; US 2002120538 A 20020410

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
US 20020133691	A1	EN	11	7	Continuation of application	US 1997980481
					Continuation of application	US 2001866078
					Continuation of patent	US 6253311
					Continuation of patent	US 6405306

Original Titles:Instruction set for bi-directional conversion and**dransfer** of integer and floating point**data** Instruction set for bi-directional conversion and**dransfer** of integer and floating point **data Alerting Abstract** ... Method for **transferring** data **between integer** and floatingpoint **register** files; Microprocessor; and Mehod for **transferring data** between floating point and**integer register** files... ... ADVANTAGE - The data is bidirectionally transmitted between integer and floating**point register** files rapidly without requiring intermediate storage in system memory. Since the floating pointregisters store both floating point**data** and integer **data**, the conversion process is **separated** into distinct**steps** for **format** conversion and**data** movements.Original Publication Data by Authority**Original Abstracts:**An apparatus and method for bi-directional**format** conversion and**transfer** of **data** between **integer** and **floating** point **registers** is provided. A floating point register is configured to**store** floating point **data**, and integer data, in a variety of numerical formats. Data is moved in and outof the floating point **register** as integer **data**, **and** is converted **into** floatingpoint **format** as needed. Separate **processor** instructions are provided for **format** conversion and**data transfer** to allow **conversion and transfer** operations to be**separated**. An

apparatus and method for bi-directional **format** conversion and transfer of **data** between integer and **floating** point **registers is** provided. **A** floating point **register** is configured **to** store floating point **data**, and **integer data**, in a variety of numerical formats. Data is moved in and out of the floating **point** register as integer **data**, and is converted into floating **point** format as **needed**. Separate processor instructions are provided for **format** conversion and **data transfer** to allow conversion and **transfer** operations to **be separated. >...Claims: translating the MOVE and CONVERT macro instructions into MOVE and CONVERT micro instructions, respectively; a first register file, for storing data in integer format; a second register file, for storing data in floating point format and in integer format; conversion logic, coupled to said second register file, for converting data in said second register file from floating point format to integer format upon execution of said CONVERT micro instructions; and a bus, coupling said first register file to said second register file, to allow data stored in integer format within said second register file to be transferred from said second register file to said first register file, without requiring transfer to external memory, upon execution of said MOVE micro instruction.**

18/3,K/3 (Item 3 from file:350) **Links**
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0012637336 *Drawing available*
WPI Acc no: 2002-486395/200252
XRPX Acc No: N2002-384675
Database management method for redundant array of inexpensive disk device, involves registering and updating management information unregistered in database fulfilling certain conditions in another database
Patent Assignee: HITACHI LTD (HITA); KAWAMURA N (KAWA-I); TSUCHIDA M (TSUC-I); YAMASHITA N (YAMA-I)
Inventor: KAWAMURA N; TSUCHIDA M; YAMASHITA N

Patent Family (6 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 2002157156	A	20020531	JP 2001195684	A	20010628	200252	B
US 20020107876	A1	20020808	US 2001907049	A	20010717	200254	E
			US 2001944262	A	20010831		
US 20020107878	A1	20020808	US 2001907049	A	20010717	200254	E
US 6801921	B2	20041005	US 2001907049	A	20010717	200465	E
US 6829623	B2	20041207	US 2001907049	A	20010717	200480	E
			US 2001944262	A	20010831		
US 20050027759	A1	20050203	US 2001907049	A	20010717	200511	E
			US 2001944262	A	20010831		
			US 2004929699	A	20040830		

Priority Applications (no., kind,date): JP 2000278671 A 20000908

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
JP 2002157156	A	JA	16	15		
US 20020107876	A1	EN			Continuation of application	US 2001907049
US 6829623	B2	EN			Continuation of application	US 2001907049
US 20050027759	A1	EN			Continuation of application	US 2001907049
					Continuation of application	US 2001944262
					Continuation of patent	US 6801921
					Continuation of patent	US 6829623

Database management method for redundant array of inexpensive disk device, involves registering and updating management information unregistered in database fulfilling certain conditions in another database

Original Publication Data by Authority...**Original Abstracts:**contain data that corresponds to a specified time. For example, the content of the intermediate**storage** is subsequently **copied** or used to update another database. When the above duplication or incorporation is completed, the..... corresponds to a specified time. For example, the content of the intermediate storage is subsequently**copied** or **used** to **update** another database. When the above duplication or incorporation is completed, the intermediate storage unit is..... contain data that corresponds to a specified time. For example, the content of the intermediate**storage** is subsequently **copied** or used to **update** another database. **When** the above duplication or incorporation is completed, the intermediate storage unit is updated for the... corresponds to a specified time For example, the content of the intermediate storage is subsequently**copied** or **used** to **update** another database. When the above duplication or incorporation is completed, the intermediate storage unit isintermediate storage is subsequently copied or used to**update** another database. **When** the above duplication or incorporation is completed, the intermediate**storage** unit is **updated** for the transactions that have taken place during the above operations to be synchronized with... ..**Claims:**least a first database and a second database, comprising:maintaining a duplicate pair of first**data** and second **data** in a first **format** in the first **database** in response **to** database transactions;maintaining**third data** in a second **format** in the second database, the second **format** being **organized** to summarize the **first data** and the second **data**;determining **a** point in time for a predetermined **database** management task;discontinuing the database transactions to and from the first data in the first... ... the point in time;connecting the second database to the third database;extracting a portion **of** the rolled **back second** data;**updating** the third **data in the** third **database based** upon the extracted from the**second** database;rolling forward the second data in the second database to match the first data... ..What is claimed**is**:**1**. A method of managing a **plurality** of databases in response to continuous transactions, the databases including at least a first database and a second database, comprising:concurrently maintaining a duplicate pair of first**data** and second **data** in a first **format** in the first database in response to database transactions;maintaining third**data** in a second **format** in the second database, the second **format** being organized to summarize the first **data** and the second data;determining a point in time for a predetermined database management task... ... the point in time;connecting the first data in the first database and the third **data in** the **second database**;**updating** the third **data** in the **second database based** upon the rolled back **first data** inthe first **database**;rolling forward the **first data** in the first database to **match** the second **data** in the first **database**; andresuming the database transactions to and from the first data and the second data

18/3,K/4 (Item 4 from file:350) **Links**
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0010690699 *Drawing available*
WPI Acc no: 2001-300387/200131
Related WPI Acc No: 2003-896062; 2004-131401; 2005-519684; 2006-371886
XRPX Acc No: N2001-215546
Bus system for master-slave system of computer, consists of receive locked loop circuit whichgenerates internal write clock signal that varies from master clock signal in accordance with write offset value
Patent Assignee: DONNELLY K S (DONN-I); GARLEPP B W (GARL-I); HO T (HOTT-I); HOROWITZ M A (HORO-I); KIM (KIMM-I); KIM J (KIMJ-I); LAU B C (LAUB-I); RAMBUS INC (RAMB-N); SIDIROPOULOS S (SIDI-I); STARK D C (STAR-I); VU R (VURR-I); YU L (YULL-I); ZERBE J L (ZERB-I)
Inventor: DONELLY K S; DONNELLY K S; GARLEPP B W; HO T; HO T C; HOROWITZ M A; KIM; KIM J; LAU B; LAU B C; LAU B C K; LAU C; SIDIROPOULOS S; STARK D C; VU R; YU L; ZERBE J L

Patent Family (14 patents, 93 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2001029680	A1	20010426	WO 2000US28134	A	20001012	200131	B
AU 200110801	A	20010430	AU 200110801	A	20001012	200148	E
EP 1226507	A1	20020731	EP 2000972087	A	20001012	200257	E
			WO 2000US28134	A	20001012		
US 6643787	B1	20031104	US 1999421073	A	19991019	200374	E
US 20040076192	A1	20040422	US 1999421073	A	19991019	200428	E
			US 2003684618	A	20031013		
US 20040098634	A1	20040520	US 1999421073	A	19991019	200434	E
			US 2003700655	A	20031103		
US 6950956	B2	20050927	US 1999421073	A	19991019	200563	E
			US 2003700655	A	20031103		
EP 1624362	A2	20060208	EP 2000972087	A	20001012	200611	E
			EP 200523820	A	20001012		
DE 20023766	U1	20060316	DE 20023766	U	20001012	200621	E
			EP 2000972087	U	20001012		
EP 1226507	B1	20060329	EP 2000972087	A	20001012	200623	E
			WO 2000US28134	A	20001012		
			EP 200523820	A	20051102		
US 7042914	B2	20060509	US 1999421073	A	19991019	200632	E
			US 2003684618	A	20031013		
DE 60027038	E	20060518	DE 60027038	A	20001012	200635	E
			EP 2000972087	A	20001012		
			WO 2000US28134	A	20001012		
US 20060120409	A1	20060608	US 1999421073	A	19991019	200639	E
			US 2003684618	A	20031013		

18/3,K/5 (Item 5 from file:350) **Links**
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0010520696 *Drawing available*
WPI Acc no: 2001-122213/200113
XRPX Acc No: N2001-089688
Data transferring method for video decoder system, involves transferring data using shared memory bus in response to primary and secondary parameter sets
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)
Inventor: CARR J D

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 6167475	A	20001226	US 1998111110	A	19980706	200113	B

Priority Applications (no., kind, date): US 1998111110 A 19980706

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 6167475	A	EN	15	6	

Data transferring method for video decoder system, involves transferring data using shared memory bus in response to primary and secondary parameter sets Original Titles:Data transfer method/engine for pipelining shared memory bus accesses. **Alerting Abstract** ...sets are received and stored in respective parameter registers (200,210). A shared memory bus **transfers data** in response to parameter sets without relinquishing access to shared memory bus between **transferring** of **data** in response to both parameter sets. ... **Data transfer** engine for **bus access** controller; **Data transferring** program DESCRIPTION OF DRAWINGS - The figure shows the block diagram of **data transfer** engine. Original Publication Data by Authority **Original Abstracts:**A **data transfer** engine, method and article of manufacture are provided for use in a functional unit of an integrated system for enhanced access and **transfer** of **data** over a shared **data** bus. The **data transfer** technique comprises pipelining **data transfer** requests onto the shared bus. The technique involves receiving and storing **first** transfer parameter set in a primary parameter **register** within the **data transfer** structure, and receiving and storing a **second transfer** parameter set in a **secondary** parameter register within the **transfer** structure. Thereafter, **data** is **transferred** using the shared memory bus in response to the **first transfer** parameter set and the **second transfer** parameter set without relinquishing access to the shared memory bus between **transferring** of **data** in response to the different parameter sets. A situational wait decision is preferably implemented in practice to decide whether to pipeline consecutive **data transfer** requests based upon the **characteristics** of the **first transfer** parameter set and/or the **second transfer** parameter set, as well as the identities of the requesters providing the **first transfer** parameter set and the **second transfer** parameter set. **Claims:** A method of **transferring data using a** shared memory bus, comprising the steps of: receiving and storing **first** transfer parameter set in a primary parameter register; receiving and storing a **second transfer** parameter set in a **secondary parameter register**; **and transferring** data **with** said shared memory bus in **response** to said **first** parameter set and said **second** parameter set without relinquishing access to said **shared** memory bus between **transferring** of data in response to said **first parameter** set **and transferring** of **data** in **response** to said **second**

18/3,K/6 (Item 6 from file:350) **Links**
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0009420303 *Drawing available*
WPI Acc no: 1999-357946/199930
XRPX Acc No: N1999-266489
Data migration system e.g. for telecommunications network
Patent Assignee: TELEFONAKTIEBOLAGET ERICSSON L M (TELF)
Inventor: BUGNON J; COULOMBE B; COULOMBE M; GLITHO R; SUGIRTHARAJ D

Patent Family (9 patents, 80 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 1999027734	A1	19990603	WO 1998SE1965	A	19981030	199930	B
AU 199911817	A	19990615	AU 199911817	A	19981030	199944	E
US 6115463	A	20000905	US 1997975632	A	19971121	200044	E
GB 2349778	A	20001108	WO 1998SE1965	A	19981030	200058	E
			GB 200015120	A	20000620		
DE 19882829	T	20010322	DE 19882829	A	19981030	200117	E
			WO 1998SE1965	A	19981030		
CN 1279870	A	20010110	CN 1998811407	A	19981030	200128	E
MX 2000004756	A1	20010201	MX 20004756	A	20000516	200168	E
GB 2349778	B	20021127	WO 1998SE1965	A	19981030	200303	E
			GB 200015120	A	20000620		
CN 1126416	C	20031029	CN 1998811407	A	19981030	200554	E

Priority Applications (no., kind,date): US 1997975632 A 19971121

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
WO 1999027734	A1	EN	20	6		
National Designated States,Original	AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW					
Regional Designated States,Original	AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
AU 199911817	A	EN			Based on OPI patent	WO 1999027734
GB 2349778	A	EN			PCT Application	WO 1998SE1965
					Based on OPI patent	WO 1999027734
DE 19882829	T	DE			PCT Application	WO 1998SE1965
					Based on OPI patent	WO 1999027734

GB 2349778	B	EN			PCT Application	WO 1998SE1965
					Based on OPI patent	WO 1999027734

Original Titles:Migration of subscriber **data** between home location **registers** of a telecommunications system... ...MIGRATION OF SUBSCRIBER **DATA** BETWEEN HOME LOCATION **REGISTERS** OF A TELECOMMUNICATIONS SYSTEM... ...administrator generates a command issued to the first database node to extract certain telecommunications related **data** and **format** the extracted **data** for communication over the common channel signaling system link towards the second database node. The.....execution of the command a common channel signaling functionality level of the second home location **register** to support the **data** communication. Original Publication Data by Authority **Original Abstracts:** A common channel signaling system interconnects two home location **registers**. A **data** administrator responds to a network operator request by **sending** commands to a **first** (originating) home location **register** to have subscriber **data** extracted and formatted for communication over the common channel signaling system. Prior to communication, the... ... stored. A data network and service management access layer further interconnect the two home location **registers**. The **data** administrator responds to a generic network operator migration request by generating home location register specific commands instructing the first home location **register** to extract subscriber **data** for **transfer** over the **data** network and through the service management access layer to the **second** home location register for storage. **Transfer** considerations are also evaluated to select either the common channel signaling system or data network..... A common channel signaling system (44) interconnects two home location **registers** (42). A data **administrator** (46) responds **to** a network operator request by **sending** commands to a **first** (originating) home location **register** to have subscriber **data** extracted (70) and **formatted** (72) for communication (74) over the common channel signaling system. Prior to communication, the first... ... A data network and service management access layer (94) further interconnects the two home locations **registers**. The **data** administrator **responds** to **a** generic network operator migration request by generating (116) home location register specific commands instructing the first home location **register to** extract subscriber **data** for **transfer** over **the data network** and through (**118**) the service management access layer to the **second** home location register **for** storage (122). **Transfer** considerations are also **evaluated** to select either the common channel signaling system or data network (150) for the migration... **Claims:** A data migration system for a telecommunications network, comprising: a **first** database node for storing telecommunications **related data**; a **second database node** for storing telecommunications **related data**; a common channel signaling **system link** of the telecommunications network connecting the first and second database nodes; and a data administrator generating a command issued to the first database **node** to extract certain telecommunications **related data** and **format** the extracted **data** for communication over the **common** channel **signaling** system link **towards** the second database node; wherein the first database node verifies with the second database node...

18/3,K/7 (Item 7 from file:350) **Links**
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0008431121 *Drawing available*
WPI Acc no: 1997-549314/199750
Related WPI Acc No: 1996-068584; 1998-506195; 2000-636986
XRPX Acc No: N1997-458087
Shared floating-point register for dual-instruction-set processor - has shared floating point register is in number of floating point data registers in dual-instruction-set floating point processor, for storing mantissa portion and exponent portion of number represented in floating-point format
Patent Assignee: EXPONENTIAL TECHNOLOGY INC (EXPO-N)
Inventor: BLOMGREN J S; BRASHEARS C S; RICHTER D E

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 5685009	A	19971104	US 1994277962	A	19940720	199750	B
			US 1995564719	A	19951129		

Priority Applications (no., kind, date): US 1994277962 A 19940720; US 1995564719 A 19951129

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
US 5685009	A	EN	22	8	C-I-P of application	US 1994277962
					C-I-P of patent	US 5481693

...**has shared floating point register is in number of floating point data registers in dual-instruction-set floating point processor, for storing mantissa portion and exponent portion of... Alerting Abstract** ...The system includes a shared floating point **register** for storing **information** to be **transferred** between a **first** program comprised of floating point instructions from a CISC instruction set and a second program.. ...**Information** is **transferred** from the **first** program to the **second** program using the shared floating point register. The shared floating point register is in a number of floating point **data registers** in the dual-instruction-set floating point processor. Each register in the number of floating point **data registers** stores a mantissa portion and an exponent portion of a number represented in a floating Original Publication Data by Authority..**Original Abstracts:** RISC) instruction set and from a complex instruction set computer (CISC) instruction set. Floating point **data** is **transferred** from **a** CISC **program** to a RISC program running on the CPU by using shared floating point registers. The... ... RISC flags with the same function are merged to the same register bit. The floating-**point data registers** are also **merged together**, allowing a CISC program to pass floating-point data to a RISC program merely by writing one of its floating-point **data registers**, switching control **to the** RISC program, and the RISC program reading one of its floating-point **data registers** that is **merged with** and corresponds to the CISC floating-point **data register** that was **written to** by the CISC program. An extended-precision CISC **data** format is supported **by pairing** two of the RISC-size floating-point **data registers.** **>...Claims: dual-instruction-set floating point processor, the shared register system comprising: a shared floating point register for storing information to be transferred between a first program comprised of floating point instructions from a CISC instruction set and a second program comprised of floating point... ... floating**

point register, for accessing the shared floating point register from the CISC instruction set, the first means writing information into the shared floating point register responsive to a first subset of instructions from the CISC instruction set; andsecond means... ... register, for accessing the shared floating point register from the RISC instruction set, the second means reading information from the shared floating point register responsive to a second subset of instructions from the RISC instruction set,whereby information is transferred from the first program to the second program using the shared floating point register.

XX

18/3,K/8 (Item 8 from file:350) **Links**
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0008310912 *Drawing available*
WPI Acc no: 1997-422037/199739
XRPX Acc No: N1997-351529
Information registration search appts e.g. for company name, telephone number, zip code - includes second renewal unit which updates data corresponding to display content and administration information by frames other than frame accomplished by indication
Patent Assignee: CANON KK (CANO)
Inventor: MIURA K

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 9190442	A	19970722	JP 19962770	A	19960111	199739	B

Priority Applications (no., kind, date): JP 19962770 A 19960111

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
JP 9190442	A	JA	8	10	

Information registration search appts e.g. for company name, telephone number, zip code... ...includes second renewal unit which updates data corresponding to display content and administration information by frames other than frame accomplished by indication Original Titles: INFORMATION REGISTERING AND RETRIEVING DEVICE AND INFORMATION DISPLAY METHOD **Alerting Abstract** ...displays the stored data by a data display unit (104) on a screen with desired **format** of frame. An administration **information** memory unit stores the administration information corresponding to display **data**. Based on an operation indication **a first** renewal unit **updates** the **data** stored in the **data** memory unit... ...Corresponding to the contents and the administration **information**, the data are **updated** by a **updating** unit. A **second** renewal unit **updates** the display **contents** and administration **information** on data by frames other than the frame which is accomplished by indication...

18/3,K/9 (Item 9 from file:350) **Links**
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0008245778 *Drawing available*
WPI Acc no: 1997-353023/199733
XRPX Acc No: N1997-292485
Network server providing map data giving easy enlargement of data services - provides map data comprises map database storing position data and map data, activated by input of search command to generate map data related to position data, information database stores information data and position data
Patent Assignee: SONY CORP (SONY)
Inventor: HIRONO C

Patent Family (13 patents, 9 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 784296	A1	19970716	EP 1997300103	A	19970109	199733	B
AU 199710110	A	19970717	AU 199710110	A	19970110	199739	E
JP 9311873	A	19971202	JP 1996339768	A	19961219	199807	E
KR 1997066934	A	19971013	KR 1997377	A	19970109	199842	E
SG 75807	A1	20001024	SG 199611950	A	19961231	200060	E
AU 731535	B	20010329	AU 199710110	A	19970110	200124	E
US 6263343	B1	20010717	US 1997778571	A	19970103	200142	E
US 20010044802	A1	20011122	US 1997778571	A	19970103	200176	E
			US 2001862350	A	20010522		
JP 2002197476	A	20020712	JP 1996339768	A	19961219	200261	E
			JP 2001320835	A	19961219		
EP 784296	B1	20030910	EP 1997300103	A	19970109	200360	E
DE 69724675	E	20031016	DE 69724675	A	19970109	200376	E
			EP 1997300103	A	19970109		
US 6718344	B2	20040406	US 1999778571	A	19990112	200425	E
			US 2001862350	A	20010522		
JP 3882569	B2	20070221	JP 1996339768	A	19961219	200716	E
			JP 2001320835	A	20011018		

Priority Applications (no., kind,date): JP 199620435 A 19960111; JP 199691937 A 19960321; EP 1997300103 A 19970109

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
EP 784296	A1	EN	41	30	
Regional Designated States,Original	DE FR GB NL				

JP 9311873	A	JA	27	37		
SG 75807	A1	EN				
AU 731535	B	EN			Previously issued patent	AU 9710110
US 20010044802	A1	EN			Division of application	US 1997778571
					Division of patent	US 6263343
JP 2002197476	A	JA	24		Division of application	JP 1996339768
EP 784296	B1	EN				
Regional Designated States,Original	DE FR GB NL					
DE 69724675	E	DE			Application	EP 1997300103
					Based on OPI patent	EP 784296
US 6718344	B2	EN			Division of application	US 1999778571
					Division of patent	US 6263343
JP 3882569	B2	JA	31		Division of application	JP 1996339768
					Previously issued patent	JP 2002197476

...**Original Titles:**METHOD AND DEVICE FOR **REGISTERING INFORMATION**, METHOD AND DEVICE FOR PROVIDING INFORMATION, AND METHOD AND DEVICE FOR DISPLAY... ...System for providing and linking regularity**updated** map **data** with **data** related to the map.. Original Publication Data by Authority.**Original Abstracts:**are sent and received between different application programs using inter-application exchange in a standard **data format**. Required map **data** and related **data** are displayed on the screen using a first application program having a function for converting received additional drawing**data** and setting **data** to the aforesaid **data format** and transmitting it by inter-application exchange, then using a second application program MPapln which... ... are sent and received between different application programs using inter-application exchange in a standard **data format**. Required map **data** and related **data** are displayed on the screen using a first application program having a function for converting received additional drawing**data** and setting **data** to the aforesaid **data format** and transmitting it by inter-application exchange, then using a second application program MPapln which... ... are sent and received between different application programs using inter-application exchange in a standard **data format**. Required map **data** and related **data** are displayed on the screen using a first application program having a function for converting received additional drawing**data** and setting **data** to the aforesaid **data format** and transmitting it by inter-application exchange, then using a second application program which displays..... a screen using a first application program having a function for converting received additional drawing**data** and setting **data** to the aforesaid **data format** and transmitting it by inter-application exchange, then using a second application program that displays...
...**Claims:**position data and map data, activated by input of a search command, and generating related **data**; and network structure **transferring** said search command and said related data... ... map data and data related to said map data at a user terminal, comprising: map **data** means for regularly **updating** and storing said map **data** corresponding to position **data**, for **sending** a map **data** search page to said user terminal, for retrieving said regularly **updated** map **data** according to multiple searching parameters simultaneously entered by a user using said map data search... ... addition to a location name, and for displaying at said user terminal only said regularly **updated** map **data** retrieved according to said searching parameters when said user directly accesses said regularly **updated** map **data**; position **data** means for storing said position data and **first** map-**related data** in accordance with one of said position **data** and said map data, for **sending** a position **data** and **first** map-**related data** search page to said user terminal, for retrieving said position data and said **first** map-**related data** according to said multiple searching

parameters entered by said user using said positiondata and **first** map-**related data** search page, and for displaying at said user terminal only said positiondata and said **first** map-**related data** retrieved according to said multiple searching parameters when said userdirectly accesses said position data and said**first** map-**related data**;guide **data** means for storing**second** map-**related data**, for **sending** a guide **data** search page to said user terminal, for retrieving said **second** map-**related data** according to said searching parameters entered by said user using said guide data search page, and for displaying at said user terminal only said**second** map-**related data** retrieved according to said multiple searching parameters when said user directly accesses said**second** map-**related data**, wherein said guide data means selectivelydisplays map data corresponding to said**second** map-**related data** and said **second** map-**related data** only when said user presses a map button displayed with said**second** map-**related data** at said user terminal; andnetwork means for**transferring** to said map **data** means, to said position data means, and to said guide data means said searching parameters... ... using said map data search page, said searching parameters entered on said position data and**first** map-**related data** search page and said searching parameters entered on said guide**data** search page, respectively, and for **transferring** from said map **data** means said regularly **updated** map **data**, from said position **data** means said position data and said**first** map-**related data**, and from said guide data means said**second** map-**related data** and said map data, whereinsaid map data means, said position data means, and said... ... said map data at a user terminal, comprising:map data means for storing said map**data** corresponding to position**data**, for **sending** a map **data** search page to said user terminal, for retrieving said map data according to multiple searching... ... user directly accesses said map data;position data means for storing said position data and**first** map-**related data** in accordance with one of said position**data** and said map data, for **sending** said position **data** and **first** map-**related data** search page to said user terminal, for retrieving said position data and said**first** map-**related data** according to said multiple searching parameters entered by said user using said position data and**first** map-**related data** search page, and for displaying at said user terminal only said position data and said**first** map-**related data** retrieved according to said multiple searching parameters when said user directly accesses said position data and said **first** map-**related data**;guide **data** means for storing**second** map-**related data**, for **sending** a guide **data** search page to said user terminal, for retrieving said**second** map-**related data** in response to said searching parameters entered by said user using said guide data search page, and for displaying at said user terminalonly said **second** map-**related data** retrieved according to said multiple searching parameters when said user directlyaccesses said **second** map-**related data**, wherein said guide data means selectively displays map data corresponding to said**second** map-**related data** only when said user desires to view said**second** map-**related data** and said corresponding map **data**; andnetwork means for**transferring** to said map **data** means, to said position data means, and to said guide data means said searching parameters entered using said map **data** search page, and for **transferring** from said map **data** means said map data, from said position data means said position data and said**first** map-**related data**, and from said guide data means said**second** map-**related data** and said map data, wherein said map data means, said position data means, and said...

18/3,K/10 (Item 10 from file:350) **Links**
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0008095144 *Drawing available*
WPI Acc no: 1997-192442/199717
XRPX Acc No: N1997-159039
Direct access memory controller for computer system - includes set of independently programmable DMA control registers which identify source, destination and quantity of data to be transferred between memory and I/O device via I/O bus
Patent Assignee: AST RES INC (ASTR-N)
Inventor: KABENJIAN G V

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 5613162	A	19970318	US 1995368474	A	19950104	199717	B

Priority Applications (no., kind, date): US 1995368474 A 19950104

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 5613162	A	EN	24	9	

...**includes set of independently programmable DMA control registers which identify source, destination and quantity of data to be transferred between memory and I/O device via I/O bus Original Titles:** Method and apparatus for performing efficient direct memory access **data transfers**. **Alerting Abstract** ...independently programmable DMA control registers which identify a first source, a first destination and a **first** quantity of **data** to be **transferred** between a memory and an I/O device via the I/O bus. A second.....of independently programmable DMA control registers identifies a second source, a second destination and a **second** quantity of **data** to be **transferred** between the memory and the I/O device via the I/O bus. A set of device parameter registers are programmed to specify the **data transfer characteristics** of the I/O device.. ...the registers in the first set of DMA control registers are selected to control the **first transfer** of **data** between the memory and the I/O device. The second set of DMA control registers are selectable as soon as the **first transfer** of **data** is complete to control the **second transfer** of **data** between the memory and the I/O device.. ...ADVANTAGE - Can be programmed to optimise DMA interface. Provides efficient **data transfer**. Original Publication Data by Authority **Original Abstracts:** A method and apparatus provide a direct memory access (DMA) system that **transfers data** between a **memory in** a computer system and a plurality of I/O devices. The DMA system includes at... ... multiple DMA transfers can occur concurrently. Each channel includes a pair of buffers so that **data** can be **transferred between** one buffer **and** memory at a rate determined by the memory and **data** can be **transferred between** the other **buffer** and the I/O device at a rate determined by the I/O device. Transfers between the two **buffers** occur at a **data** rate determined by the bus connecting the two buffers. Thus, the transfers between the two... . **Claims:** independently programmable DMA control registers which identify a first source, a first destination and a **first** quantity of **data to** be **transferred between** said memory **and** said I/O device via said I/O bus, said **first** set of DMA control **registers** being selectable to control a **first transfer** of **data between said** memory **and** said I/O device; a **second** set of independently programmable DMA

control registers which identify a**second** source, a second destination and**a second** quantity **of data** to be **transferred** between said **memory** and said **I**/O device via said I/O bus, said second set of DMA control registers **being** selectable to control a**second transfer** of **data** between said **memory and** said **I**/O device; and a set of device parameter registers which are programmable to specify the**data transfer** characteristics of said I/O device**wherein said registers** in said **second** set of DMA control registers are programmable while said**registers in** said **first** set of DMA control registers are selected to control**said** first **transfer** of **data between** said memory and said **I/O device**, said **second set** of DMA control registers being selectable as soon **as** said first **transfer** of data is complete to control said **second transfer of data between** said memory and said **I/O device.>**

18/3,K/11 (Item 11 from file:350) **Links**
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0007962502 *Drawing available*
WPI Acc no: 1997-052746/199705
Related WPI Acc No: 2005-045919
XRPX Acc No: N1997-043235
Portable voice and data communications terminal - operates in both analogue and digital cellular modes switching between mode as required and recognises incoming paging signals as either digital or analogue
Patent Assignee: CIRRUS LOGIC INC (CIRR-N); PACIFIC COMMUNICATION SCI INC (PACI-N)
Inventor: CASHMAN R P

Patent Family (6 patents, 3 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 1996041491	A1	19961219	WO 1996US8021	A	19960530	199705	B
US 5819184	A	19981006	US 1995487043	A	19950607	199847	E
			US 1995496282	A	19950628		
US 6157836	A	20001205	US 1995487043	A	19950607	200066	E
			US 1998163410	A	19980930		
US 6334062	B1	20011225	US 1995487043	A	19950607	200206	E
US 6449494	B1	20020910	US 1995496282	A	19950628	200263	E
			US 1998107025	A	19980629		
US 6850774	B1	20050201	US 1995487043	A	19950607	200511	E
			US 1998163412	A	19980930		

Priority Applications (no., kind,date): US 1998163412 A 19980930; US 1998163410 A 19980930; US 1998107025 A 19980629; US 1995487043 A 19950607; US 1995496282 A 19950628

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
WO 1996041491	A1	EN	51	6		
National Designated States,Original	CA MX					
US 5819184	A	EN			C-I-P of application	US 1995487043
US 6157836	A	EN			Division of application	US 1995487043
US 6449494	B1	EN			Division of application	US 1995496282
					Division of patent	US 5819184
US 6850774	B1	EN			Division of application	US 1995487043
					Division of patent	US 6334062

Original Publication Data by Authority**Original Abstracts:**A portable radio telephone handsetoperates as a **data transfer** terminal as **well as** an analog cellular telephone subscriber station. Two modes of operation, an analog cellular communication mode... ... A portable radio telephone handset operates as a**data transfer** terminal as well**as an** analog cellulartelephone subscriber station. Two modes of operation, an analog cellular communication mode and... ... A portable radio telephone handset operates as a**data transfer** terminal as well**as an** analog cellular telephone subscriber station. Two modes of operation, an analog cellulacommunication mode and... ... A portable radio telephone handset operates as a**data transfer** terminal as well **as an** analog cellulartelephone subscriber station. Two modes of operation, an analog cellularcommunication mode and... ... A portable radio telephone handset operates as a **data transfer** terminal as well as an analog cellular **telephone subscriber** station. Two modes of operation, an analog cellular communication mode and a Cellular DigitalPacket... ... A portable radio telephone handset (22, 100) having a radio control (108) operates as a**data transfer** terminal as well as an analog cellular telephone subscriber station. Two modes **of operation**, an analog cellular communication mode (210) and a Cellular Digital Packet Data (CDPD)mode (206... ...**Claims:**cell in a Cellular Digital Packet Data (CDPD) system, where said wireless subscriber station contains **a** first cell **transfer database** pertaining to radio frequency**characteristics** of **said** first cell, said method comprising steps of:(a) **sending a** polling**receiver** ready (RR) signal from said **wireless** subscriber station **to** a CDPD Mobile **Data Base** Station (NDBS) in said **second** cell;(b) determining a**first** time interval for a complete Received Signal Strength Indication (RSSI)**scan of** said **second** cell by **said** wireless subscriber station;(c) dividing said first time interval into a pluralityof sequential overlapping... ... an Advanced Mobile Phone Service(AMPS) control channel during successive time slots, thereby creating a **second** cell transfer data base transfer data basepertaining to said second cell; and(e) deleting saidfirst cell transfer database upon acquisition of said**second** cell transfer **database**.... ... for requesting CDPD communication;(c) means for operating on said first communication system while remaining **registered** on said CDPD communication system; and(d) means for synchronizing with said CDPD system to.... by a mobile data intermediate system (MD-IS), where said wireless subscriber station contains a **first** cell **transfer** database pertaining to radio frequency characteristics of said first cell, said method comprising steps of:(a)**sending a** polling receiver ready (**RR**) signal from said wireless subscriber station to a CDPD Mobile **Data Base** Station (MDBS) in said **second** cell;(b) determining a**first** time interval for a complete**Received** Signal Strength Indication (RSSI) scan of said **second** cell by said wireless subscriber station;(c) dividing said**first time** interval into a plurality of overlapping time slots;(d) alternately scanning said CDPD channel and**an Advanced** Mobile Phone Service (AMPS)**control** channel during successive timeslots for a first duration of said first time interval, thereby creating a **second** cell **transfer data base** pertaining to said**second** cell; and(e) deleting said**first cell transfer** database upon acquisition of said**second** cell **transfer** database... ... **What** is claimed is:1. A**method** for **communicating** between a wireless subscriber station and both an analog cellularvoice communication system and a

18/3,K/13 (Item 13 from file:350) **Links**
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0007158331 *Drawing available*
WPI Acc no: 1995-195768/199526
XRPX Acc No: N1995-153684
Digital memory for spatial light modulator display unit - has memory array for storing image data and having capacity of at least bit size of two image frames and number of first registers for receiving pixel data for storage in memory array
Patent Assignee: GOVE R J (GOVE-I); TEXAS INSTR INC (TEXI)
Inventor: DOHERTY D B; GOVE R J; HASHIMOTO M; SAMPSELL J B; URBANUS P M

Patent Family (8 patents, 8 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 655723	A1	19950531	EP 1994118421	A	19941123	199526	B
CA 2136478	A	19950531	CA 2136478	A	19941123	199535	E
JP 7240891	A	19950912	JP 1994331985	A	19941130	199545	E
TW 267231	A	19960101	TW 1995106153	A	19950616	199612	E
CN 1109177	A	19950927	CN 1994118611	A	19941130	199734	E
EP 655723	B1	19980722	EP 1994118421	A	19941123	199833	E
DE 69411859	E	19980827	DE 69411859	A	19941123	199840	E
			EP 1994118421	A	19941123		
CN 1056929	C	20000927	CN 1994118611	A	19941130	200471	E

Priority Applications (no., kind,date): US 1993160344 A 19931130

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
EP 655723	A1	EN	11	8		
Regional Designated States,Original	DE FR GB IT NL					
CA 2136478	A	EN				
JP 7240891	A	JA	16			
TW 267231	A	ZH				
EP 655723	B1	EN				
Regional Designated States,Original	DE FR GB IT NL					
DE 69411859	E	DE			Application	EP 1994118421
					Based on OPI patent	EP 655723

...**having capacity of at least bit size of two image frames and number of first registers for receiving pixel data**

for storage in memory array Alerting Abstract ...set of input registers (31) and two sets of output registers (32,33). The input **registers** receive pixel **data** before it has been processed. The memory delivers this data back to a processor for processing via the first output **registers**. The **data** is returned via the input registers.. Original Publication Data by Authority...**Original Abstracts:** for a digital display system (10) having a spatial light modulator (SLM) (16) that displays **data** in bit-plane **format**. The memory (15) **has** control means (25) for row random access. It also has a set of input registers (31) and two sets of output registers (32), (33). The input **registers** (31) receive pixel **data** before it has **been** processed. The memory (15) delivers this data back to a processor (14) for processing via **first** set of output **registers (32)**. After processing, the input **registers** (31) receive pixel **data** that has been **fully** processed and is ready for display. The **second** set of output **registers (33)**, controlled at their input or output by a bit selector (37), delivers bit-planes of... ...**Claims:** capacity of at least the bit-size of two image frames; a plurality of first **registers** for **receiving** pixel **data** for **storage** in said memory array; a pluralty of **second registers** for **transferring** pixel **data** from **said** memory array to said processor; a plurality of third **registers** for **transferring data from said** memory array to said SLM after said pixel data has been processed; a bit selector for controlling said SLM registers such that said SLM **registers** deliver **data** to **said** SLM; and control means for controlling the addressing and timing of reading to and writing... ... capacity of at least the bit-size of two image frames;

a plurality of first **registers** (31) for receiving **pixel** data for storage in said memory array;

a plurality of **second** registers (32) for **transferring** pixel **data** from said memory **array** to said processor;

a plurality **of** third **registers** (33) for **transferring data** from said memory array to said **SLM** after said **pixel data has** been processed;

a bit selector (37) for controlling said third registers such that **said** third registers **deliver data** to said SLM; and

control means (25) for controlling the addressing and timing of reading to and writing from said memory array via said registers.

18/3,K/14 (Item 14 from file:350) **Links**
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0006117756 *Drawing available*
WPI Acc no: 1992-358695/199244
XRPX Acc No: N1992-273405
Knowledge base management system esp. for deductive reasoning - monitors accessing of information from reasoning section to knowledge base section to determine if information has been requested before
Patent Assignee: MITSUI CHEM INC (MITA); MITSUI PETROCHEM INDCO LTD (MITC); MITSUI PETROCHEMICAL IND LTD (MITC)
Inventor: NISHIMURA T; OSADA Y; SHIBAO K; SHIMIZU M

Patent Family (9 patents, 7 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 510452	A2	19921028	EP 1992106152	A	19920409	199244	B
CA 2065473	A	19921026	CA 2065473	A	19920407	199303	E
US 5355445	A	19941011	US 1992865186	A	19920408	199440	E
EP 510452	A3	19930825	EP 1992106152	A	19920409	199508	E
EP 510452	B1	19980819	EP 1992106152	A	19920409	199837	E
DE 69226673	E	19980924	DE 69226673	A	19920409	199844	E
			EP 1992106152	A	19920409		
CA 2065473	C	19990810	CA 2065473	A	19920407	199952	E
KR 245742	B1	20000302	KR 19925937	A	19920410	200122	E
JP 3184551	B2	20010709	JP 199197750	A	19910426	200140	E

Priority Applications (no., kind,date): JP 199195858 A 19910425; JP 199197750 A 19910426

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
EP 510452	A2	EN	18	13		
Regional Designated States,Original	DE FR GB IT NL					
CA 2065473	A	EN				
US 5355445	A	EN	16	13		
EP 510452	A3	EN				
EP 510452	B1	EN				
Regional Designated States,Original	DE FR GB IT NL					
DE 69226673	E	DE			Application	EP 1992106152
					Based on OPI patent	EP 510452
CA 2065473	C	EN				
JP 3184551	B2	JA	9		Previously issued patent	JP 04326428

Alerting Abstract ...The **knowledge base** management system comprises a**primary** data store (102), a change **registration** section (103), a**data** conversion section (104), a knowledge base section (107), a**reasoning** calculation section (108) and a... ...from the reasoning section tothe knowledge base section. An accessed place is collated with **information** from the change**registration** section before the knowledge management section instructs the conversion section to perform a corresponding data...**Equivalent Alerting Abstract** ...The system includes a primary data storage section storing received primary**data**. A change **registration** section records change**data** indicating which of the primary data has been changed. A data conversion section converts the primary**data** into secondary **data** which has a **data format** compatible with the knowledge base system. A **knowledge base** section has a**secondary** data storage section which stores the secondary data, and a reasoning calculation section accesses the**secondary data based** on a received retrieval inquiry... OriginalPublication Data by Authority..**Original Abstracts:**which may necessitate regeneration of parts of the secondary data. Details of these changes are**stored** in the change**registration** section (103). The knowledge management section monitors access by the reasoning calculation section (108) to the knowledge base section (107). If an attempt**is made** to access **secondary** data affected by changes to the primary data, then that secondary data is re-generated by conversion**section (104)**. Advantage dynamics **updating** of **secondary data** removes the need**for** time-**consuming large**-scale **data** regeneration... ... A knowledge base management system and method for managing a**knowledge** base system **which includes** a **primary** data storage section storing received**primary data**. A change **registration** section **records change data** indicating which of the **primary data** has **been** changed. A **data conversion** section converts the primary **data** into secondary data which has a data format compatible with the knowledge base system. A **knowledge base** section has a**secondary** data storage **section which** stores the **secondary data**, and a reasoning **calculation** section accesses the **secondary data based on** a received retrieval inquiry. A knowledge management section**controls the conversion** section. Specifically, the knowledge management section controls the conversion section toonvert the primary data... ...**Claims:**specifications and other factors of figures supplied from one of an input means, an external**data base** and **other means** through a **primary** data input **section** is stored; (b) a change registration section which, f **a data** is added at said primary data input section or the data is changed at this... ...information representing this change; (c) a data conversion section which converts the primary data into**secondary** data; (**d**) a **knowledge base** section having a**secondary data storage** for storing the**secondary** data and a reasoning rule storage for storing reasoning rules; (e) a knowledge management section... ... from said reasoning calculation section to said knowledge base section, collates an accessed placewith **information** from said change**registration** section, instructs said**conversion** section to perform**corresponding data** conversion processing and to store the converted data in said knowledge base section if it... ...an information reasoning apparatus comprising: (a) aprimary data storage (102) in which data comprising**primary** data **on the** shapes and specifications and other factors of figures supplied from one**of** an input means, an external **data base and** other means through a **primary** data input section (101) is stored; (b) a change registration section (103) which, if **data is** added at said **primary** data **input** section or the data is changed at this section, records**information** representing this change; (c) a data conversion section (104) which converts the primary datainto **secondary** data (105); (d) a **knowledge base** section (107) having a**secondary** data storage (105) for storing the secondary data and a reasoning rule storage (**106**) for storing reasoning rules; (e)**a knowledge** management section (110) for**controlling** conversion processing of the conversion section (104); and (f) a reasoning calculation section (108) for.... section (107) corresponds to changed or added data, instructs said conversion section (104) to perform**data** conversion **processing** of the corresponding changed or added data and to store the converted data in said knowledge base**section**, thereby **updating** the corresponding part of the**secondary** data (105). of: (a) storing primarydata received from one of an input means and an external**data base**; (b) converting said primary data into**secondary** data using **a data** conversion section, said**secondary data** having a data format compatible with said knowledge base system; (c)

storing said **secondary data**; (**d**) storing added or **updated primary** date **received from** one of an input means and **an** external data base; (e) recording change data indicating **which of** said **primary** data has **been** added or updated; (f) accessing **said secondary data based** on a received retrieval inquiry; (g) collating said accessing **of said secondary** data with said recorded change data; and (**h**) **controlling** said **data** conversion section **to** convert said **primary data corresponding to** said **secondary** data to be accessed in said step (f) when said recorded change data indicates that... ... primary data corresponding to said secondary data to be accessed in said step (f) has **been added** or **updated.**>

? t /3,k/all

20/3,K/1 (Item 1 from file:350) **Links**
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0013798877 *Drawing available*
WPI Acc no: 2003-898907/200382
Related WPI Acc No: 2003-843978; 2003-898922; 2003-899894
XRPX Acc No: N2003-717406

Providing search results to user over Internet involves receiving first query request at server from user, performing first search on data repository based on first query request, and generating first set of search results

Patent Assignee: VALK J W (VALK-I)
Inventor: VALK J W

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20030182278	A1	20030925	US 2002367178	P	20020325	200382	B
			US 2002403327	P	20020813		
			US 2003396544	A	20030325		

Priority Applications (no., kind, date): US 2002403327 P 20020813; US 2002367178 P 20020325; US 2003396544 A 20030325

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
US 20030182278	A1	EN	45	17	Related to Provisional	US 2002367178
					Related to Provisional	US 2002403327

Alerting Abstract ...data repository based on first query request, generating first set of search results based on **first** search, generating **first** meta- **information set**, **sending** the **first** subset of **first** search results to the user, **sending** the **first** meta-**information set** to the user, and freeing up computer resources. ...based on the first query request, generating first set of search results based on the **first** search, generating **first** meta- **information set** describing **first** query request and the **first** subset, sending the **first** subset of the **first** search results to the user, **sending** the **first** meta- **information set** to the user for storage, and freeing up computer resources at the server used to... **Technology Focus** COMPUTING AND CONTROL - Preferred **Process**: The method of **search** providing results further includes receiving second request for second subset of the first search results at the server from the user vithe web page interface, receiving portion of the **first** meta- **information set** at the server from the user, determining the first query request and the first subset... ...based on the re-performed first search, generating the second subset of the re-generated **first** search results, **sending** the **second** subset of the re-generated first search results to the user, generating a **second** meta-**information set** describing the **first** query request and the **second** subset, **sending** the **second** meta-**information set** to the user for storage, displaying the second subset of the first search results at... ...search are

the same as the re-generated first search results from the re-performed **first** search. The generated meta-**information set** comprises **first** meta-information, **second** meta- **information**, third meta-**information**, fourth meta- **information**, **attribute** value of the sorted record **attribute** of the first **information** record, unique identification designation, **attribute** value of the sorted record **attribute** in last **information** record, and unique identification designation of the last information record. The set of criteria comprises... ...criteria, first criteria having first criteria value for identifying a property category of the record **attributes** in each of the **information** records, second criteria for instructing the server to sort the attribute values of the identified... Original Publication Data by Authority. **Original Abstracts:** A subset of the search results is generated based on a specified block size. A **first** meta-**information set is** generated, **which describes** at least the query request and the subset. The subset of the search results and the **first** meta-**information set are** sent **to the** user. Computer resources are freed up at the server which were used to perform the search, generate the search results, generate the subset, and generate the **first** meta-**information set so** that **the server** may use its computer resources for other searches by other users. .. **Claims:** first search; generating a first subset of the first search results based on a specified **block** size; generating a **first** meta-**information set** describing at **least** the **first** query request and the **first** subset; **sending** the **first** subset **of** the **first** search results to the user; **sending** the **first** meta-**information set** to the user **for** storage **by** the user; and **freeing** up computer resources at the server used **to** perform **the first search**, **used** to generate the **first** search results, used to generate the first subset, and used to generate the **first** meta-**information set** so **that** the server may use its computer resources for other searches by other users.

20/3,K/2 (Item 2 from file:350) **Links**
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0012846898 *Drawing available*
WPI Acc no: 2002-705409/200276
XRPX Acc No: N2002-556022
Data collection method in computer network, involves storing identified logical parameters and corresponding indirect memory references, in machine independent format
Patent Assignee: UNIV LOUISIANA STATE & AGRIC& MECH COLL (LOUU)
Inventor: CHANCHIO K; SUN X

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 6442663	B1	20020827	US 1998100364	A	19980619	200276	B

Priority Applications (no., kind, date): US 1998100364 A 19980619

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 6442663	B1	EN	35	15	

Original Publication Data by Authority...**Claims:** digital computer having physical memory locations wherein the data are stored, and transforming the collected **data** into **a** machine-independent **format** adapted **for transfer** to **a second** digital **computer** which will continue execution of the process from the point at which data is collected... correlating data types associated with logical parameters of the process to physical memory locations in **the** first computer;(c) **searching** the physical memory locations in the first computer, in accordance with the correlations in the.... logical parameters that could be used in the continued execution of the process on the **second** computer; and(d) **saving** the values and **types** of the identified logical parameters **of** the process in a machine-independent **format**, based on the **data** in the physical memory locations **of** the first computer **and** the correlations represented by the type **information table**; and **saving** the correlations of the memory representation **data** structure associated **with** the identified logical parameters in machine-**independent format**; and **saving** the correlations of the indirect memory references associated with the identified logical parameters in machine...

20/3,K/3 (Item 3 from file:350) **Links**
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0012275383 *Drawing available*
WPI Acc no: 2002-216064/200227
Related WPI Acc No: 2006-511212
XRPX Acc No: N2002-165563
Data capture program running on local computer system, is executed to transfer program data from secondary file system of remote computer system to output and/or storage device in local computer system
Patent Assignee: POWLETTE J F (POWL-I); PROPHET FINANCIAL SYSTEMS INC (PROP-N); MAQUIS TECHTRIX LLC (MAQU-N)
Inventor: POWLETTE J F

Patent Family (3 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20020018077	A1	20020214	US 1998172191	A	19981013	200227	B
			US 2001845595	A	20010430		
US 6489954	B1	20021203	US 1998172191	A	19981013	200301	E
US 7036081	B2	20060425	US 2001845595	A	20010430	200628	E

Priority Applications (no., kind, date): US 1998172191 A 19981013; US 2001845595 A 20010430

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
US 20020018077	A1	EN	14	3	Division of application	US 1998172191

Data capture program running on local computer system, is executed to transfer program data from secondary file system of remote computer system to output and/or storage device in local computer... Alerting Abstract ...computer system so as to be stored in a secondary file system, when the program **data** is not **transferred** to the local file system.The program is executed to interact with a browser on the local computer system, so that the browser **transfers** the program **data** from the **secondary** file system to an output and/or storage device in the local computer system. ... future reference. Permits essentially unlimited editing capability, by being flexible so that more than one **initial data file** can be loaded from several remote servers and modified.Original Publication Data by Authority...**Original Abstracts:** session, the modified applet window containing any such input or modifications to the applet window **data**. Because the **updated applet** window **data cannot** be written **to** the user's client system, however, (due to security restrictions), the present invention instead causes such modified window data to be converted **to** a standard compressed graphics file **format** (such as GIF for an image file for example), and then uploaded to the remote... ... server. At that point, the user can then perform any desired operation on the file (i.e., such as **printing** or saving to a local filesystem) since the browser has access to the local... .. session, the modified applet window containing any such input or modifications to the applet window **data**. Because the **updated** applet window **data** cannot be **written** to the **user**'s client **system**, however, (due to security restrictions), the present invention instead causes such modified window data to be converted to a standard compressed graphic **file format** (such as GIF for an

image file for example), and then uploaded to the remote... ...the user can then perform any desired operation on the file (i.e., such as **printing or** saving to a local filesystem) since the browser has access to the local system... ...**Claims:** the local filesystem, but which data capture program does have access rights to a **second file** system at a separate computing system, the **data capture** program being characterized in that: the data capture program is configured such that when it handles program **data** that cannot be **transferred** to such local file system, the **data** capture program transmits **said** program **data** from the local computing system to the second file system; and the data capture program... ... local file system; and wherein said browser can then access said program data from said **second** file system, and **transfer** said program **data** to an output and/or storage device **in** the local computing **system**. in the form of modified file data associated with modifications made by the user to **initial** data from an **initial data file** presented to said user in a first window by said data capture program; and (c) accessing said data from said separate file system **utilizing said data** capture **program**; (**d**) **transferring** said **data** to an I/O and/or storage device in the local computing system using said browser, which browser has access to the local file system. 1. A method of generating a Java-based chart comprising the steps of: retrieving chart **data** using a hypertext **transfer** protocol from a remote world-wide web accessible server system using a Java-based applet... .. computing system; wherein said chart data relates to a price history for a company stock; **presenting** said chart **data in** graphical form in said window for viewing by a user as a visual historical price

20/3,K/4 (Item 4 from file:350) **Links**
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0011163631 *Drawing available*
WPI Acc no: 2002-101170/200214
XRPX Acc No: N2002-074973
Data editing method involves updating the second format data and the state information, based on the comparison of the state information and the second format data
Patent Assignee: YAMAHA CORP (NIHG)
Inventor: YAMAUCHI A

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 2001337677	A	20011207	JP 2000158426	A	20000529	200214	B

Priority Applications (no., kind, date): JP 2000158426 A 20000529

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
JP 2001337677	A	JA	10	6	

Data editing method involves updating the second format data and the state information, based on the comparison of the state information and the second format data Alerting Abstract ...NOVELTY - The method involves **updating** the **second format data** and the state **information**, **based** on the comparison of the state **information** and the second **format data**. The state **information** is added to the **first format data** when **updating** the **second format data**. The **first format data** are edited based on the edit input content. ... ADVANTAGE - Enables accelerating the process for containing the **data** of a second **format**.... ... DESCRIPTION OF DRAWINGS - The figure shows the block diagram explaining the sheet music data **editing process**. (Drawing includes non-English language text).

20/3,K/5 (Item 5 from file:350) **Links**
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0011093086 *Drawing available*
WPI Acc no: 2002-028766/200204
Related WPI Acc No: 2001-151773
XRPX Acc No: N2002-022261
Printer controller controls image formation based on image data generated by analysis of printing data stored in memories
Patent Assignee: CANON KK (CANO)
Inventor: UTSUNOMIYA K; UTSUNOMIYA T

Patent Family (2 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 2001080143	A	20010327	JP 1999263907	A	19990917	200204	B
US 7034954	B1	20060425	US 2000572914	A	20000517	200628	E

Priority Applications (no., kind, date): JP 1999139627 A 19990520; JP 1999263907 A 19990917

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
JP 2001080143	A	JA	21	21	

Alerting Abstract ... **Printing** control **procedure**; **Printing control** program Original Publication Data by Authority...**Claims:**storing unit adapted to store print data of a second type of print job;a**information** storing **unit** adapted to store **attribute information** of the first type of**print** job whose print **data** is **stored in** said first storing unit and **attribute information** of the **second** type of print job whose print **data** is **stored in** said second storing unit;a generating unit adapted to analyze the print data stored in said**first** storing unit and generating image **data based** on the analyzed print data;an image**formation** control unit adapted to allow **the image** forming unit to form an image on the basis of the image data generated by... ... of print job, in accordance with a printing instruction input separately from the print job;a storage control unit adapted to copy the print data stored in said**second** storing unit and storing the **copied** print data into said first**storing** unit, in accordance with the printing**instruction**; andan **information** storage control **unit** adapted **to copy** attribute **information** of the **second** type of print job in said **information** storing unit **and** storing the **copied** attribute **information as** attribute **information** corresponding to the**copied** print **data** into said **information storing** unit, in accordance with the **printing** instruction.

20/3,K/6 (Item 6 from file:350) **Links**
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0008018108 *Drawing available*
WPI Acc no: 1997-111345/199711
Related WPI Acc No: 1997-079702
XRPX Acc No: N1997-092142
Interactive television system e.g for teletext multiplex broadcast - has TV receiver which generates additional information selecting screen, and accesses and displays such information by manipulating script according signal from TV remote control
Patent Assignee: TOSHIBA KK (TOKE)
Inventor: AOKI K; ICHIHASHI T; SHIMAMOTO K

Patent Family (18 patents, 12 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 757485	A2	19970205	EP 1996305496	A	19960726	199711	B
AU 199660775	A	19970206	AU 199660775	A	19960730	199714	E
JP 9046651	A	19970214	JP 1995194687	A	19950731	199717	E
JP 9046652	A	19970214	JP 1995194688	A	19950731	199717	E
JP 9046653	A	19970214	JP 1995194700	A	19950731	199717	E
JP 9046654	A	19970214	JP 1995195121	A	19950731	199717	E
JP 9046655	A	19970214	JP 1995195259	A	19950731	199717	E
JP 9046656	A	19970214	JP 1995195303	A	19950731	199717	E
CA 2182456	A	19970201	CA 2182456	A	19960731	199722	E
KR 1997009368	A	19970224	KR 199631712	A	19960731	199812	E
US 5903262	A	19990511	US 1996689069	A	19960730	199926	E
SG 69986	A1	20000125	SG 199610363	A	19960729	200015	E
US 6075527	A	20000613	US 1996689069	A	19960730	200035	E
			US 1998212856	A	19981217		
CN 1148775	A	19970430	CN 1996112168	A	19960731	200110	E
KR 232413	B1	19991201	KR 199631712	A	19960731	200111	E
CA 2182456	C	20010515	CA 2182456	A	19960731	200131	E
CN 1059535	C	20001213	CN 1996112168	A	19960731	200472	E
IN 199601697	I1	20051104	IN 1996DE1697	A	19960730	200603	E

Priority Applications (no., kind,date): JP 1995195258 A 19950731; JP 000071946 A 19950731; JP 1995195303 A 19950731; JP 1995195259 A 19950731; JP 1995195121 A 19950731; JP 1995194700 A 19950731; JP 1995194688 A 19950731; JP 1995194687 A 19950731

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
EP 757485	A2	EN	52	40		

Regional Designated States,Original	DE FR GB SE					
JP 9046651	A	JA	16			
JP 9046652	A	JA	12			
JP 9046653	A	JA	10			
JP 9046654	A	JA	10			
JP 9046655	A	JA	13			
JP 9046656	A	JA	12			
CA 2182456	A	EN				
SG 69986	A1	EN				
US 6075527	A	EN			Division of application	US 1996689069
CA 2182456	C	EN				
IN 199601697	I1	EN				

Original Publication Data by Authority...**Original Abstracts:**script is executed according to the selection instruction, and selected additional information is generated and**displayed** on a display screen in a display**format** conforming to the **content** of the **information**. the selection instruction, and selected additional information is generated and displayed on a displayscreen **in** a display **format** conforming to the**content** of the **information**. selection instruction, and selected additional information is generated and displayed on a display screen in**a** display **format** conforming to the**content** of the **information.** ...**Claims:**the selection means;a read-only memory for storing a script interpreter executing an interactive**procedure** and character font**information**; andwherein said first and second display control means execute the stored control data by using the script interpreteniorder to access the character font information to control the**displaying of** information on said**display**.... ... processing device,said receiver comprising,first receiving means for receiving a television broadcast signal including**transfer** designation **information** and a program configured to control the television display to cause displayof a menu... ... atelevision broadcast being received as a part of the television broadcast signal, wherein the **transfer** destination**information** and the program **are** embedded in a vertical blanking interval of the television**broadcast** signal,**means** for identifying the program and the **transfer** destination**information** from the television broadcast signal received by said first receiving means and for storing the identified program,means forinputting an instruction from an**operator**,a **memory** for storing identification**information**,display control means for causing the televisin display to display an additional information selection screen for selecting arbitrary additional**information** from plural **pieces** of additional **information based** on the stored program,**in** response to the instruction input by said input means, andoutput means for outputting**transfer data** corresponding to the additional**information** selected by the operator of said plural pieces of additional information, together with the identification information stored in said**memory**, according to the **transfer** destination**information**, **in** response to the instruction input by said input means; andthe line processing device comprising,**second** receiving means for receiving the**transfer data** and the identification**information** output **from** said output means, andprocessing**means** for executing processing which corresponds to the additional information selected **by** the operator, according to**the transfer data** and identification**information** received by**said second receiving** means.

20/3,K/7 (Item 7 from file:350) **Links**
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0007844348 *Drawing available*
WPI Acc no: 1996-473899/199647
XRPX Acc No: N1996-399768
Video graphic program editing for video game prodn. system - by forming related edit display partially in response to transfer of related video graphic program data from first to second processor
Patent Assignee: NINTENDO CO LTD (NINT)
Inventor: KIMIZUKA M; NAKAMURA T; NISHIUMI S; SAIKAI S; SUZUKI T; YAMATO S

Patent Family (3 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 8241429	A	19960917	JP 1995284253	A	19951031	199647	B
US 6115036	A	20000905	US 1994332555	A	19941031	200044	E
JP 3701064	B2	20050928	JP 1995284253	A	19951031	200566	E

Priority Applications (no., kind,date): US 1994332555 A 19941031

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
JP 8241429	A	JA	47	57		
JP 3701064	B2	JA	52		Previously issued patent	JP 08241429

...**by forming related edit display partially in response to transfer of related video graphic program data from first to second processor** ...**Original Titles:**Video game/videographics program editing apparatus with program halt and **data transfer** features. **Alerting Abstract** ...The method involves controlling a video graphic program**edit operation** currently performed in an interactive mode calculating system using 2 processors. The video graphic program... ...The related video graphic program**data** is **transferred** from a **first** processor to a **second** processor. A related edit displayis formed in response partially... Original Publication Data by Authority.**Original Abstracts:**or sound effects. The main CPU and game CPU cooperate in the game execution and**editorial process** such that an **editing** screen generated by the main CPU is superimposed on a game screen generated bythe is assigned a unit ID which is associated with a wide range of object, game**characteristics**, game processing and location **data** associated with the identified object. A widerange of information is likewise stored in data... .**Claims:**display frame to be edited in response to a user input via said input device**transferring** videographics program **related data** from said **first processor** to said **second processor**; andgenerating**an** editing related display by said second processor in part in response to said videographics program**related data** received from said**first** processor.

20/3,K/8 (Item 8 from file:350) **Links**
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0006157349 *Drawing available*
WPI Acc no: 1992-400617/199249
Related WPI Acc No: 1988-079221
XRPX Acc No: N1992-305485
Thermal transfer type printer for printing e.g. bar-code - has thermal head control circuit controlling head temp. by varying current-on times of heating cells based on print data and control circuit
Patent Assignee: SHINKO ELECTRIC CO LTD (SHIA)
Inventor: IWATA S; KAWANO J; MITSUSHIMA S

Patent Family (3 patents, 3 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 516247	A1	19921202	EP 1992202307	A	19870915	199249	B
EP 516247	B1	19950322	EP 1987308116	A	19870915	199516	E
			EP 1992202307	A	19870915		
DE 3751191	G	19950427	DE 3751191	A	19870915	199522	E
			EP 1992202307	A	19870915		

Priority Applications (no., kind, date): JP 1986221066 A 19860919; JP 1986240263 A 19861009

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
EP 516247	A1	EN	16	11	Related to patent	EP 260917
Regional Designated States,Original	DE FR GB					
EP 516247	B1	EN	19	11	Related to application	EP 1987308116
Regional Designated States,Original	DE FR GB					
DE 3751191	G	DE			Application	EP 1992202307
					Based on OPI patent	EP 516247

Alerting Abstract ...current-on time data so that an optimum current-on time is read from the **characteristics** corresp. to selected current-on time **data** based on the temp. data. The power is supplied to heat the selected heating cells... Original Publication Data by Authority... **Original Abstracts:** and second current-on time data, each of the first and second current-on time **data representing data of** specific current-on time **characteristics designating** a relation between the current-on time and the surrounding temperature of the thermal head (6), the value of the **first current**-on time data **being set** higher than the value of the second current-on time data; (b) temperature detecting means... ... means so that an optimum current-on time is read from the current-on time **characteristics** corresponding to selected current-on time **data** based on the temperature **data**, and **the** power being supplied so as to heat the heating cells selected by the print data..... **Claims:** painted surface of said transfer ribbon is touched to the surface of said printing

paper **when** a **printing operation is performed**, a power being supplied to saidthermal head wherein said heating cells are heated in... ... and second current-on time data, each of said first and second current-ontime **data** representing **data of** specific **current**-on time **characteristics** designating a **relation** between the current-on time and the surrounding temperature of said thermal head (6),the... ... means so that an optimum current-on time is read from the current-on time **characteristics** corresponding to selected current-on time**data** based on said **temperature data**, and the power being supplied**so** as to heat said heating cells selected by said print data for said optimum current..... of said transfer ribbon is touched to the surface of said printing paper when **printing operation is** performed, a power being supplied to said thermal head wherein said heating cells are heated in accordance with saiddot pattern and said thermal melting**ink is** melted and transferred to said printing paper so that said desirable dot pattern is transferred to said printing paper, said thermaltransfer type printer comprising: (a) memorymeans (15,16) **for** storing print**data** corresponding to said desirable dot pattern and**first and second** current-on time **data**, each **of** said **first** and **second** current-on time**data** representing **data** of specific **current**-on time **characteristics** designating a relation between the current-on time and the surrounding temperature of said thermal head (6),the value of**said** first **current**-on time **data** being set **higher** than ... current-on time data; (b) temperature detecting means (10) for detecting said surrounding temperature of**said** thermal head and outputting temperature**data** corresponding to detected surrounding temperature of said thermal head; and (c)thermal head control means... ... in said memory means so that an optimum current-on time is read from the **current**-on time characteristics corresponding to selected current-on time**data based** on said **temperature** data, **and** the power being supplied so as to heat said heating cells selected bysaid print **data** for said optimum current-on time.

20/3,K/9 (Item 9 from file:350) **Links**
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0005787735 *Drawing available*
WPI Acc no: 1992-009998/199202
XRPX Acc No: N1992-007686
Processing system for despatch of parcels - uses central computer accepting instructions and current data from smart card to handle organisation, documentation and franking
Patent Assignee: ALCATEL SATMAM (ALCA-N); NEOPOST IND (NEOP-N)
Inventor: VANPOUCKE J

Patent Family (5 patents, 3 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 464766	A	19920108	EP 1991110940	A	19910702	199202	B
FR 2664402	A	19920110	FR 19908395	A	19900703	199213	E
US 5262939	A	19931116	US 1991725119	A	19910703	199347	E
EP 464766	B1	19981104	EP 1991110940	A	19910702	199848	E
DE 69130435	E	19981210	DE 69130435	A	19910702	199904	E
			EP 1991110940	A	19910702		

Priority Applications (no., kind,date): FR 19908395 A 19900703

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
EP 464766	A	EN				
Regional Designated States,Original	DE FR GB					
US 5262939	A	EN	5	2		
EP 464766	B1	FR				
Regional Designated States,Original	DE FR GB					
DE 69130435	E	DE			Application	EP 1991110940
					Based on OPI patent	EP 464766

Equivalent Alerting Abstract ...The system comprises a set of "file memories" (**2**) containing firstly the identities of carriers, of **senders**, of the services offered by each carrier, of the documents that should accompany each shipment... Original Publication Data by Authority...**Original Abstracts:**A system for processing parcel shipping comprises a set of "file memories" (**2**) containing firstly the identities of carriers, of **senders**, **of** the services offered by each carrier, of **the** documents that should accompany each shipment, and of the access of each sender to the... ... of the system by intervening in data exchanges between the programmed control unit (3) and **the set** of memories (**2**). **>...Claims:one of that carrier's services which is to be used, the system comprising:**

first memories constituting. firstly a carrier file containing characteristics specific to the carriers usable by the system and relating to individual identification of..... of the carriers that each of the senders may use and the services of said carriers to which they have access, the first memories also including a destination country file containing characteristics specific to said countries and relating to their identification both... .. with respect to the documents specific to services for said countries:a second memory constituting a shipment file:
input means for inputting data relating to each shipment;
print means for outputting documents; and
a programmed control unit... ... said print means, and including shipment preprocessing means for inputting data and for verifying the input data from the carrier and sender files, shipment processing means attributing an individual reference to each shipment which, together with the data as input and verified defines the characteristics of the corresponding shipment, referred to as a "processed" shipment, and storing the characteristics of each processed shipment in a shipment record in the shipment file, and document printing control means for generating the documents identified in the carrier file on the basis of the shipment record in the shipment file corresponding... ... which is to be used, the system comprising: first memories constituting, firstly a carrier file containing characteristics specific tothe carriers usable by the system and relating to individual identification of the carriers themselves and to identification... ... that each of the senders may use and the services of said carriers to which they have access; the first memories further including a destination country file containing characteristics specific to countries contained in said country file and..... to services for said countries; a second memory constituting a shipment file; input means for inputting data relating to each shipment; print means for outputting documents; a programmed control unit coupled to said files, to said input means and to said print means, and including: shipment preprocessing means for verifying the input data from the carrier and sender files; shipment processing means for attributing an individual reference to each shipment which, together with the data as input and verified, defines the characteristics of the corresponding shipment, referred to as a "processed" shipment, and storing the characteristics of each processed shipment in a shipment record in the shipment file; and document printing control means for generating the documents identified in the carrier file on thebasis of the shipment record in the shipment file corresponding to each shipment; said s...